

Kelvin Thomson MP
Federal Member for Wills

***Five Million is too many: Securing the
Social and Environmental Future of
Melbourne***

**Submission to the *Urban Growth
Boundary Review***

July 2009

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1. Executive Summary

Melbourne is at a fork in the road. For a long time our city, its way of life and the opportunities it offers to all who come here has been the envy of cities around the world. To maintain this desirable situation we must act decisively to address the issues that threaten Melbourne with becoming another crowded, over populated, congested and polluted metropolis. Our city has reached the point where we need to change direction or risk our social and environmental future.

The *Urban Growth Boundary Melbourne@ 5 million* review provides the opportunity to investigate the issues currently facing our city and the options we still have to address them. This submission will identify the ecological issues associated with expanding the northern, western and southern Urban Growth Boundaries and discuss the long term consequences for Melbourne of the proposed expansion. I am making recommendations which will protect Melbourne's social and economic growth, local amenity, transport system and reduce our carbon footprint. I have put forward an alternative plan to that of an ever expanding urban fringe.

Melbourne is one of the world's most liveable cities. This year it was ranked third out of 140 cities as being the most liveable city. Our lifestyle, employment opportunities, health system, education system, infrastructure and environment are all aspects of a community that is the envy of many around the world (*The Age* 2009).

Melbourne is now the fastest growing city in Australia, with thousands flocking to live here on a never before seen scale. Melbourne's population is growing on a scale not seen in Australia before, swelling by almost 150,000 people in two years (Colebatch 2009). The 2001 Census recorded Melbourne's population at 3.3 million people (ABS 2001). In 2006 our population reached 3.6 million (ABS 2006). It has continued to grow faster than that of any other city in the country.

Melbourne's population grew by 74,713 in the year to last June and by 74, 791 during the previous year. Melbourne's population is growing by more than 200 people a day, or almost 1500 per week. Melbourne's population growth last year far outpaced all other major Australian cities. Sydney grew by 55,047 (1.35%), Brisbane by 43,404 (2.3%) and Perth by 43,381 (2.8%) (Colebatch 2009).

Our city is forecast to have 4 million people living in it by the end of this year, with annual population growth rates reaching 2% (Colebatch 2009). The outer fringe of Melbourne is currently taking 61% of our population growth (Buckley 2009). This is placing pressure on the existing Urban Growth Boundary.

Climate change is the biggest moral issue of our time and addressing it must be at the forefront of our public policy planning. Compared to other major cities throughout the developed world, Melbourne has one of the highest rates of carbon emissions per capita. Our city's cars, trucks, motorcycles and public transport services were recently recorded to generate 11 million tonnes of carbon dioxide a year, compared with just 8.5 million tonnes in London. This equates to 3.1 tonnes of carbon per person in Melbourne compared with 1.2 tonnes per person in Greater London. One of the key reasons for our significantly higher rate of emissions per person is because of Melbourne's larger geographic area, which means journeys tend to be longer and heavily reliant on cars (Lucas & Millar 2008).

Existing Government policies are encouraging an expansion of up to 75,000 people a year. If we continue down this public policy path we will need to accommodate another 1 million people before 2025 (Buckley 2009). By 2036 Melbourne is predicted to have a further 1.8 million people, nearly twice the number forecast in *Melbourne 2030* (Moncrief 2008). Twice the number of people in Melbourne will mean twice the amount of carbon emissions, congestion and pollution.

In response to revised population projections showing that Melbourne will reach five million people faster than anticipated, the Victorian Government announced its intention to review the Urban Growth Boundary in December 2008 (DoPCD 2009:i). The Urban Growth Boundary was introduced in 2002 as part of *Melbourne 2030* (DoPCD 2009A). The boundary was expressly put in place to contain urban sprawl. It was expressly designed to prevent ongoing urban expansion into rural land surrounding metropolitan Melbourne and its fringe (DoSE 2005). It set out to place a clear limit to metropolitan Melbourne's development. It sought to concentrate urban expansion into growth areas that are served by high-capacity public transport (DoSE 2005A).

The most recent review of *Melbourne @ 5 million* forecasts an additional 600,000 new dwellings in Melbourne with 284,000 of these needing to be located in growth areas. Most of this future growth will be in the north and west of Melbourne (DoPCD 2009:i). The State Government is investigating changes to the Urban Growth Boundary in response to updated population forecasts and revised longer term growth issues (DoPCD:6). Areas under consideration for urban expansion include 20,448 hectares in Melbourne's west around Caroline Springs, Melton and Werribee; 25,385 hectares around Sunbury, Craigieburn and Donnybrook and 5560 hectares east of Cranbourne. Under the plan Melbourne's Urban Growth Boundary would be allowed to grow another 41,000 hectares to accommodate an extra 415,000 people. Development of these areas would lead to a loss of some of the most valuable grasslands on the city's fringe (Dowling & Lahey 2009). Around the urban fringe, we have a concentration of some of the most endangered ecosystems in Australia, including Western Basalt Plains Grassland and Grassy Woodland, and a diverse range of other vegetation types and threatened species (Environment Victoria 2009). It is vital we do everything we can to

protect these ecologically sensitive and important areas from being overrun by high density development.

The Victorian Government is now seeking public feedback on the proposals regarding the proposed changes to the Urban Growth Boundary before a final decision is made (DoPCD 2009:3). In making a final decision, I encourage the Victorian Government to consider the issues of population, local amenity and liveability, climate change, economic growth and transport. I have put forward recommendations that are designed to tackle urban sprawl and that will continue to protect the things that make Melbourne great.

Everything that makes our city the great place to live, work and raise a family, is potentially under threat if population growth and urban sprawl continue at the current rate. We must implement a strategy to control population growth, urban expansion and development. Our way of life, open spaces and infrastructure cannot be sacrificed on the altar of ever expanding population. We have a responsibility to secure our city's future through thorough, thoughtful and detailed planning. This planning should not include an expanding Melbourne waistline.

2. Introduction

Climate change is the single biggest economic and social issue of our time. Policy makers on every single front must be working towards reducing carbon emissions to secure our long term prosperity, health and wellbeing. The expansion of the Urban Growth Boundary is utterly inconsistent with tackling climate change.

Encouraging urban sprawl and ever increasing high density developments will lead to a more polluted, congested and unsustainable Melbourne. Bringing millions of people in to Melbourne will increase the stress on water supplies that are already strained, increase reliance on fossil fuels by communities that are on our urban fringe, and it will increase Melbourne's carbon footprint when we must be reducing it.

Regrettably the planning process in Melbourne is not being used to achieve environmental sustainability. Melbourne is generating more greenhouse emissions, using more water, losing open space and turning into a high rise steel and concrete jungle. Planners and policy makers talk the talk of protecting Melbourne's environment, but their actions have the opposite effect. They behave as Gough Whitlam once described rowers- facing in one direction but heading in the opposite one.

We need an environmentally sustainable development planning policy for Melbourne. We do not need more intense development or more sops to local residents. We do not need attacks on residential amenity through further loss of open space, high rise buildings which are turning Melbourne into Shanghai or Mexico City, ever larger dwellings such as the energy guzzling McMansions or policies which encourage reduced numbers of people per dwelling.

Local communities live with bad planning decisions for a lifetime and it is important that local amenity issues are considered before we continue to concrete the Green Wedges at the expense of open space that allows us to live and breathe.

We get told that population growth is inevitable and that it is desirable. Population growth has traditionally come at the expense of open space. Future public policy must take into consideration the threat which population growth poses to our existing public open spaces. Managing population growth so that it does not threaten the liveability of our city ought to be a priority of Governments.

Victoria has the capacity and resources to address climate change, fight the global economic crisis and manage urban sprawl by investing in renewable energy infrastructure and projects both at the large and small scale levels. We must invest heavily in improving public transport infrastructure to reduce car dependency and support jobs. We must hold the line on urban sprawl and put our social and environmental wellbeing first.

3. Building Melbourne: The Evolution of our City

Melbourne was founded in 1835. In 1837 Governor Bourke arrived and issued instructions for the town to be laid out (City of Melbourne 1997:8). Melbourne was designed by Richard Hoddle in 1837 and is a classic example of a city designed around a grid wherein all the principal streets are one and a half chains in width, while each city block is comprised of 10 chain squares (Greig 1928). The founding designers of Melbourne had great foresight, with CBD streets having been designed wide enough to accommodate a growing city and population. The city today still benefits from the originally designed wide streets (City of Melbourne 1997:8).

By 1920 Melbourne was a city of a million people, with a newly electrified train network that was the envy of the world. With few exceptions the network was identical to what we have today. Melbourne's extensive train network allowed the development of suburbs. Melbourne's landscape of ¼-acre blocks owes more to the early investment in public transport than to the coming of the motor car 50 years later (PTUA 2009:16-17). In Melbourne's early years the extension of our urban fringe went hand in hand with the extension of rail lines. Unfortunately in more recent times this fundamental concept has not been integrated into the planning of our city.

The post-war transformation of Melbourne from a centrally Anglo-Saxon demographic to a multicultural and diverse city has been rapid. As recently as 1947 Melbourne more than 90% of Victorians were born in Australia of mainly English, Scottish or Irish decent. The end of World War II saw a wave of European migration to our shores, bringing with them new ways of living, foods, architecture and cultures. From being a culturally monochromatic country and city, Australia now has the world's highest percentage of foreign-born population at 24.6% (Miller 2005). According to the 2006 Census, there are 156,457 people in Melbourne who were born in the United Kingdom, 73,801 born in Italy, 57,926 born in Vietnam and 52,279 from Greece (ABS 2006A).

Victoria's cultural and social diversity plays an important role in making it the preferred state of choice for international migrants, students and holiday makers. There are approximately 5 million Victorians, with more than 70% of the population living in Melbourne. Victorians come from over 200 hundred countries, speaking over 180 languages and dialects and follow over 110 religions and faiths. More than 100,000 international students study in Victoria and Victoria's tourism industry employs 6.6% of the state's workforce. Victoria has about 1.4 million international and 17.3 million domestic visitors each year. Our state's economy comprises 25% of Australia's economy (Victorian Government 2009) and is proving to be a most resilient and best positioned local economy as we experience the global financial crisis (Lenders 2008).

We now have the opposite problem that the policy makers faced following World War II. It is no longer a matter of 'populate or perish', but rather a matter of 'populate and suffocate'. The question we need to answer is whether we allow population growth to control our planning policies or whether we plan to manage population growth and distribution. Based on current population projections our city will need 600,000 new homes by 2020 (Mitchell & Higginbottom 2008). The impact of this growth on the quality of our lives will be negative, not positive and it must be challenged.

A fundamental component of planning for Melbourne's growth during the 1970s was the concept of urban growth corridors radiating outwards, separated by wedges of non-urban land (Friends of Merri Creek 2009:3). But the promise of Green Wedges to give Melbourne lungs of open space in which to breathe has been broken, and is proposed to be broken yet again. We need to retain Green Wedges as permanent wedges between growth corridors, not as potential urban land supply that is bulldozed as soon as there is a demand for it.

Melbourne is now at a fork in the road. We need to decide whether we want to continue expanding our urban waistline to accommodate more people, or whether we want to draw the line on urban sprawl and protect our city's liveability and amenity. The outcome of this review will have a great influence on the kind of city we will be leaving behind for future generations. We must show the same foresight the founders of this city showed when it was initially designed and expanded to cope with the wave of 20th century migration. They left us a city with open space, extensive tram and train networks; and liveable suburbs supported by extensive local infrastructure in the form of schools, hospitals and social services.

I encourage the State Government to ensure that the outcome of this review will be one that protects our open spaces, liveability and amenity while addressing the biggest moral challenge of our time- climate change. This review must set a framework that will leave a legacy for future generations that we can be proud of.

4. Melbourne 2030 and Melbourne @ 5 million: Proposed new Urban Boundaries and issues that require consideration

The *Melbourne @ 5 million Review* is investigating the expansion of the outer Melbourne Urban Growth Boundary to accommodate some of the 284,000 new dwellings expected to be built in the growth areas. Areas being considered for inclusion within the growth areas have been designated as 'investigation areas'. The areas being investigated include areas in Melbourne's west, north and south east (DoPCD 2009).

Extending the Urban Growth Boundary will undermine our city's natural environment and liveability. It will totally contradict the original *Melbourne 2030* plan by proposing new sprawling suburbs across land that was originally earmarked to be Green Wedge land. Endangered ecosystems and biodiversity conservation will be placed under further pressure, with new suburbs more than likely to be heavily car dependent and isolated from jobs and services (Environment Victoria 2009:1).

Around the urban fringe, we have a concentration of some of the most endangered ecosystems in Australia, including Western Basalt Plains Grassland and Grassy Woodland, and a diverse range of other vegetation types and threatened species (Environment Victoria 2009). It is vital we do everything we can to protect these ecologically sensitive and important areas from being overrun by development. Such development will also have serious implications for our ability to reduce our carbon footprint as a community. The following section of my submission will identify the individual areas of investigation and the issues associated with them being developed.

4.1 Melbourne's West Investigation Area

The Melbourne West investigation area, Wyndham Growth Area, wraps around the western boundaries of the existing growth area and extends north to Boundary Road, taking in the areas of Truganina, Tarneit and Mount Cottrell. The Public Consultation Report itself identifies a number of constraints to development including high quality vegetation, fauna, endangered Natural Temperate Grasslands of the Victorian Volcanic Plain and a number of flora species identified under the *Environment, Protection and Biodiversity Conservation Act 1999*. To address the potential loss of the open space in the investigation corridor, the report states two large grassland reserves of approximately 15,000 hectares in size be secured outside of the Urban Growth Boundary to offset the removal of native vegetation grasslands (DoPCD 2009: 30&34). I commend the proposal to protect the 15,000 hectares; however the original *Melbourne 2030* plan was designed to protect the land now being investigated for development. If we don't hold the line on urban growth now, then what is to stop future governments from destroying over ecologically sensitive grasslands and vegetation in future? Australia's native vegetation cover is shrinking every year. Talk of offsets cannot hide the fact that if this proposal goes ahead more native vegetation will be lost.

The Melton-Caroline Springs growth area boundary was modified in May 2009 because of the results of field investigations identifying the presence of nationally listed Volcanic Plains Grasslands east of Troups Road, Mt Cottrell. The Public Consultation paper identifies areas within the investigation zone with high biodiversity value, including the Natural Temperate Grasslands of the Victorian

Volcanic Plain, along with the presence of flora species listed under the *Environment, Protection and Biodiversity Conservation Act 1999*. These species are associated with the grasslands and are scattered along Kororoit Creek, located west of Caroline Springs and adjoining major grasslands south of the Ballarat rail line. With regard to public transport accessibility, the proposal to electrify the rail line to Melton will provide improved accessibility to public transport for residents in the area, with further investigations to be undertaken on effective public transport routes in possible new communities (DoPCD 2009: 39&44).

A core area of plains grasslands occurs around the edge of western Melbourne, extending across the Melton and Werribee Plains, and northwards along the Merri Valley. High quality and species rich remnants are scattered across the landscape, often differing in the mix of rare plant species they support, and each making a valuable contribution to grassland conservation. Larger areas of grassland habitat occur about the eastern slopes of Mt Cottrell and the Werribee Plains, which are important for species such as Plains Wanderer, Striped Legless Lizard and Fat-tailed Dunnart (Environment Victoria 2009:3).

The proposed suburbs on Melbourne's western fringe threaten many of the high quality grassland sites across the Melton and Werribee Plains. For example around half of grasslands in Melton Shire are in the urban investigation area, sites with very high quality. Whilst important grassland habitat reserves are proposed on the Werribee Plains and eastern slopes of Mt Cottrell, these will not compensate for the loss of species rich grasslands inside the investigation areas. Collectively the diverse and often small grassland sites that remain scattered across the landscape are crucial to conserving grassland biodiversity (Environment Victoria 2009:5).

The Werribee and Melton Plains support the largest remaining area of Victoria's Basalt Plains Grassland and are one of Australia's 15 Biodiversity Hotspots. Many of the high quality remnants lie scattered close to or within the urban areas of Werribee, Laverton, Deer Park and Caroline Springs. The proposed extensions to the western growth corridors will potentially destroy over 3000 ha of ecologically important grasslands (Green Wedges Coalition 2009).

The loss of up to 74% of the original native vegetation endangers the diversity and health of local ecosystems. The parks contain much of the remaining vegetation and are in moderate condition but relatively little habitat remains on private land. The Port Phillip and Westernport Catchment Management Authority (2007) have raised concern over further potential loss of native grassland.

Concern has also been raised by local conservation groups who have been working to protect Green Wedge areas that are currently being investigated. Developing over these grassland and open space areas will undermine the preservation work that has been undertaken by local residents (Ierodiaconou 2009).

4.2 Melbourne's North Investigation Area

The Melbourne North Investigation Area is located around the existing Sunbury Township and the town of Diggers Rest. This area contains sites with high biodiversity values that the Public Consultation Report states will pose a constraint for development. Most of the ecological attributes within the investigation area are associated with watercourses and adjacent floodplains including Jackson's Creek and Emu Creek and their tributaries. Scattered remnants of Grassy Woodlands of the Victorian Volcanic Plain occur throughout the investigation area (DoPCD 2009:50).

Sunbury comprises a number of landscape features including the extensive volcanic plain, old volcanic cones and the severely downcut Jackson's Creek and Emu Creek. Concerns raised in the initial public feedback process include the need to protect areas of high biodiversity and important landscapes, including the creek corridors (DoPCD 2009: 50&53). The consultation report states remnant grassy woodlands and grasslands in the Sunbury section of the investigation will need to be cleared to make way for housing and associated infrastructure including roads. It is suggested that grassland reserves in Melbourne's west will be made available for offsets from clearing (DoPCD 2009:56). I oppose this concept. We should be protecting and enhancing existing woodlands. Offsetting ecologically sensitive land does not mean that we will have more of it, but rather less. We need to be protecting these spaces so that we can reduce our carbon emissions and increase our carbon storing option which these open spaces achieve through photosynthesis.

I support the proposal to extend electrified railway services to Sunbury (DoPCD 2009:54). This will increase public transport options for residents, decrease car dependency and assist locals to reduce their carbon footprint, giving them more efficient access to the rail network to commute across the city for employment and social commitments.

The Melbourne North Investigation Area also extends from the outer areas of Craigieburn, through Donnybrook and ends south of the township of Wallan. The Public Consultation Report identifies a number of significant flora and fauna, including within the watercourse of Merri Creek, Edgars Creek and Darebin Creek. Scattered remnants of Grassy Woodlands of the Victorian Volcanic Plain occur throughout the Investigation Area and adjoining precincts within the Urban Growth Boundary. The largest concentration of remnant vegetation occurs in the south-east of the Investigation Area, with some consolidated patches in the south-west and along the Merri Creek where there are many adjoining stony knolls (DoPCD 2009:59).

The Upper Merri catchment supports a range of National, State and Regionally significant biodiversity values. In 2006 Parks Victoria published a draft concept plan for a proposed new park along Merri Creek between the Ring Road and Craigieburn East Road, incorporating Galada Tamboore, the Cooper Street Grasslands, the Craigieburn Grasslands and other areas.

The Department of Sustainability and Environment has identified a number of significant biosites along the Merri Creek Corridor. The biosites represent the last remaining areas of extensive remnant vegetation in the eastern half of the Merri catchment. Many of these sites are on land that has been managed in such a way that biodiversity values have remained high. This is particularly the case where Native Grassland and Grassy Woodland has been retained and managed as 'unimproved' native pasture (MCMC 2009:9).

Hernes Swamp lies to the east of the Hume Highway, south of Wallan East. It contains Stony Knoll Grassland, Plains Grassland, Woodland and Seasonal Wetlands. The Beardsell section of this swamp contains significant species including Australasian Bittern, Black Falcon and Great Egret. The Camoola Swamp area consists of approximately 200ha of stony rises and swampland on the Camoola property. It has been identified as being of State significance in the biosites database (MCMC 2009:12).

Along with natural landscapes being compromised under the revised Urban Growth Boundary, natural habitat must also be considered by this review. The Growling Grass Frog is listed as 'vulnerable' under the federal Environment Protection and Biodiversity Conservation Act. Known habitat for the Growling Grass Frog is along water ways, and it is known to roam at least 100 metres away from waterbodies for feeding (MCMC 2009:10). Development of land adjacent to the waterway will compromise the Growling Frog's natural habitat.

A fundamental component of planning for Melbourne's growth since the early 1970s has been the concept of urban growth corridors radiating outwards, separated by wedges of non-urban land. The Green Wedge area to the east of Craigieburn has been greatly eroded by urban development in recent years. It is further threatened by being included in the investigation area for urban expansion. It is time to halt the outward push of urban sprawl. We should retain Green Wedges as permanent wedges between growth corridors, not as potential urban land supply that is bulldozed as soon as there is demand for it (Friends of Merri Creek 2009:3).

My office has been contacted by residents living in the investigation area pocket in Greenvale. This is an extremely small pocket of land being investigated in comparison to the rest of the northern investigation area and borders onto the Gellibrand Hill National Park. It is a prime example of urban expansion threatening existing ecosystems and woodlands.

Residents have advised my office that it would be a difficult pocket to subdivide given its constraints, and varying sizes of properties which vary from 1 hectare to 5 hectares, each uniquely shaped and proportioned. The properties have raised concern about the Growth Area Infrastructure contribution, which will require landowners to pay an up front \$95,000 per hectare on land zoned for development. Many residents have been living in the area for over twenty years and have paid for their own infrastructure, including sanitation, septic tanks, water tanks and other utility connections. Electricity is the only utility service provided for that area. The tax will affect all properties and there are some that may not be worth that amount, particularly if they are decades from being developed (Opitz 2009).

Residents also have advised me there is a fuel line to Melbourne Airport running below Somerton Road and into Section Road. This is regularly serviced by maintenance workers and it would be impractical to place bitumen over it and have it sealed. Concern has also been raised about the granite shelf that sits below and in the vicinity of homes, which will make it difficult for development to be undertaken. These difficulties were experienced during the construction of the football oval near Somerton Road; the relevant road has never been sealed because of this issue. Many residents also have shallow buried pipes servicing their septic and water tanks which would be compromised if development were to occur.

4.3 Melbourne South-East Investigation Area

The Melbourne South East Investigation Areas (Casey-Cardinia Growth Areas) extend east from the existing urban areas of Cranbourne and Langwarrin and include Cranbourne East, Clyde North and part of Devin Meadows (DoPCD 2009:72).

There are pockets of land across the Investigation Area that contain significant flora and fauna, including two threatened fauna species under the Environment Protection and Biodiversity Conservation Act 1999; Growling Grass Frog and Southern Brown Bandicoot. There are also corridors containing remnant habitat, the most significant being the Cardinia Creek corridor and the railway corridor (DoPCD 2009:72).

The new urban investigation areas, together with growth corridor land added in 2005, now threaten to remove large areas of prime farmland and to encircle Cranbourne Botanic Gardens with suburbs (Green Wedges Coalition 2009). The loss of 76% of the original native vegetation endangers the diversity and health of local natural ecosystems (PP&WPCMA 2007). They also threaten the health of Westernport Bay and its remaining seagrass. It is now acknowledged that siltation resulting from the construction of Cardinia dam caused the death of much Western Port seagrass. The current Urban Growth Boundary was designed to follow the ridge-lines to avoid more siltation damage, but the proposed new boundary pushes down into the Westernport Catchment and will increase pressure on the health of the ecology of Western Port Bay (Green Wedges Coalition 2009).

Environment Victoria says (2009:3) that the Green Wedge south of the Berwick-Packenham growth corridor contains highly productive and flood-prone farming land on the edge of Kooweerup Swamp. Market Gardens provide vegetables for Melbourne and the interconnected waterways and their associated vegetation are important habitat for the Growling Grass Frog and Southern Bandicoot. The waterways are crucial to the health of Westernport Bay and many migratory water birds. These waterways, together with small scattered remnants of endangered swamp vegetation, and heath and grassy woodlands, provide the basis for re-establishing habitat corridors across the landscape (Cardinia Environment Coalition 2009).

5. Population: its impact on liveability and local amenity

Melbourne is the fastest growing city in Australia, with thousands flocking to live here on a never before seen scale. The question we need to ask is whether allowing our population to continue growing at the current rate will improve or detract from Melbourne's liveability. We must do everything we can to protect local amenity and liveability not only for this generation, but for our children and grand children.

Melbourne's population is growing on a scale not seen in Australia before, swelling by almost 150,000 people in two years (Colebatch 2009). The 2001 Census recorded Melbourne's population at 3.3 million people (ABS 2001). In 2006 our population reached 3.6 million (ABS 2006). It has continued to grow faster than that of any other city in the country.

Melbourne's population grew by 74,713 in the year to last June and by 74,791 during the previous year. Melbourne's population is growing by more than 200 people a day, or almost 1500 per week. Melbourne population growth last year far outpaced all other major Australian cities. Sydney grew by 55,047 (1.35%), Brisbane by 43,404 (2.3%) and Perth by 43,381 (2.8%) (Colebatch 2009).

Melbourne is forecast to have 4 million people living in it by the end of this year, with annual population growth rates reaching 2% (Colebatch 2009). The outer fringe of Melbourne is currently taking 61% of our population growth (Buckley 2009) and is placing pressure on the existing Urban Growth Boundary to be expanded. If expanded, Melbourne will be much larger in area than London or New York, with freeways from Pakenham to Greensborough to way beyond Werribee, and from Sorrento to Torquay, slicing through tens of thousands of hectares of prime land (Buckley 2009).

Existing Government policies are encouraging an expansion of up to 75,000 people a year. If we continue down this public policy path we will need to accommodate another 1 million people before 2025 (Buckley 2009). By 2036 Melbourne is predicted to have a further 1.8 million people, nearly twice the number forecast in *Melbourne 2030* (Moncrief 2008). Twice the number of people in Melbourne will mean twice the amount of carbon emissions, congestion and pollution.

On current projections Melbourne will add 70,000 residents each year for the next five years making it the highest urban growth area in Australia. The population increase will mean Melbourne will require 29,000 new homes a year for the next five years (Dowling 2009A). This growth at any cost needs to be revisited.

I am of the view that over population, high density development, increased congestion and pollution, and the loss of public open spaces, grasslands and woodlands are not things that we as a community should accept. The way in which population is distributed is something that policy makers should take responsibility for.

Any pattern of growth has social, economic and environmental implications that need to be considered and balanced. We need to minimise the environmental footprint of urban areas through careful site selection, and minimise the environmental impact of development within the urban area. We should maximise access to public transport through the effective alignment of networks to

reduce car dependency. Accessible employment and potential new employment opportunities in development areas must also be a part of future plans (Planning Institute of Australia 2007).

Approximately 70% of families now have no reasonable access to public transport. Households in outer regions such as Casey and Mernda need two and three cars each. By 2025 it is estimated that 80% of Melbourne will have no reasonable access to trains or trams on a regular basis (Buckley 2009). In order to improve accessibility to tram services, the Victorian Government recently announced a plan to accelerate multi-level developments on main tram and bus routes. The plan identified more than 12,400 sites along tram lines which could accommodate around 500,000 new dwellings (Lahey 2009). People living in inner areas have been told for years that they should put up with dual occupancies, multi-unit developments, and increasingly, high rise development in order to prevent urban sprawl and a viable public transport network. However the proposal to expand the Urban Growth Boundary makes a mockery of this. *Melbourne 2030* was designed to contain urban sprawl by keeping people close to public transport services and other infrastructure. The extension of the growth zone means that the sacrificing of inner suburban quality of life is in vain. Property developers have their cake and eat it too. Growth in the inner suburbs and urban sprawl as well. We will have more communities isolated from reliable transport services and highly car dependent, as well as clogged, congested inner suburban streets.

We are seeing high rise multi storey dwellings in inner city suburbs increasing the density of our urban jungle and threatening existing public open spaces. Increasing population is putting pressure on our living spaces, parks and public open spaces. For example Coburg in my electorate of Wills needs all the open space it can get. It is largely built up and has been for many years, and the Pentridge and Kodak developments will add new pressures. The Edgar's Creek Parkland which is situated in the heart of Coburg, acts as the lungs of the Coburg community, allowing residents to live and breathe; providing essential open space with a variety of flora and fauna in our otherwise urbanised and developed area.

Edgar's Creek Parkland is owned by VicRoads and could potentially be sold for urban development and lost to the local community forever unless it is handed over to the Moreland Council. The Edgar's Creek Parkland and other similar open spaces in Melbourne are an important factor in local amenity for local communities. Providing local communities with open space has become ever more important, especially with increasing media reports and concern that Australia is in the midst of an 'obesity epidemic' (Biggs 2006), with child obesity in Australia being at an all time high (Houghton 2007).

Latest figures show that 3.71 million Australians are now classified as obese, with the estimated cost to the nationally economy being \$58 billion, with Victoria bearing \$14.4 billion of the cost (NDSS 2008).

Statistics show strong and consistent increases in the rates of combined overweight and obese children over the past 20 years (Gill & Baur et al 2008). If healthy dietary and physical activity environments and behavioural patterns can be established for young children it may help prevent the onset of overweight or obesity in adolescence and adulthood (Victorian Government 2006A).

Public open spaces play an important role in encouraging our community to stay fit and healthy. Walking is the most commonly reported sport and physical recreation activity amongst Australians, with a participation rate of 25%. People aged 55-64 years reported the highest participation rates for walking (35%), followed by those aged 45-54 (31%) and those aged 65 years and over (29%) (ABS 2006B:10).

Inner city trees and parklands can also help to reduce water use and fight climate change. For some years Australia has experienced a staggering growth in the installation of air-conditioners, with sales surging by around 10% each year, and some houses having more than one (Fisher 2009).

These air-conditioning units are ravenous electricity users, imposing heavy demands on peak-load generating capacity, especially older less efficient models. The more air-conditioners to fight the climbing temperatures, the more black balloons and carbon emissions, the more the planet heats up. Adding to their workload is the explosion in hard surfaces, patios, pebble gardens, car parks, walls, roads and buildings that retain heat, causing an urban heat island effect (Fisher 2009).

The extent to which parklands, trees, shrubs and gardens can cool places has been greatly underestimated. Estimates by the Co-operative Research Centre for Irrigation Futures are that they can lower temperatures by 2-8 degrees because increases in evapotranspiration reduce building energy use by 7-47%. Average electricity saving per tree due to lower air-conditioning use ranges from 70-90 kilowatt hours a year, with savings greater at peak times reducing overall energy demand by 10% (Fisher 2009).

Melbourne has a rich assortment of trees, shrubs and grassed areas, a resource known as the urban forest (Fisher 2009), with the Edgar's Creek Parkland being a prime example. These open spaces must be protected from urban sprawl.

A study of two forested urban parklands in Chicago found total carbon stocks of 230-260 tC ha⁻¹ and annual carbon uptake of 3-5 tC ha⁻¹yr⁻¹ (Jo & McPherson 1995:109-133). They found that 80-90% of the carbon was stored in the soils. In contrast, a study of green space in three Korean cities found storage ranging from 26 to 60 tC ha⁻¹ and annual carbon uptake of 1.6 to 3.9 tC ha⁻¹ yr⁻¹ (Jo 2002: 115-126). The continuing carbon sequestration by the parklands offset carbon emissions of the cities by 0.5-2.2%. Another US study found that urban forests across the country store an average of 25tC ha⁻¹, or about half the storage density in natural forests (Nowak & Crane 2002:381-389/ Nowak 1993: 207-217).

In order to cram people into Melbourne, local councils and communities have been deprived of their right to object or have any meaningful say about developments in their own backyard. The Victorian Government recently intervened to assume control of five projects in Melbourne, Werribee and Geelong. One of the projects includes the \$1 billion Pentridge Prison redevelopment in my electorate of Wills. I believe it is vital that local community views are heard and adhered to when it comes to planning decisions. Councils exist to serve and protect community interests and it is communities that will live with the consequences of planning decisions for decades. I urge the State Government to preserve confidence in the integrity of planning by ensuring the voices of communities are heard.

The State Government should be working to reduce obesity rates amongst the community, particularly young people, through the provision of adequate open space and recreational sporting infrastructure. Protecting the Edgar's Creek Parkland and other similar inner city open spaces as public parkland will ensure the people of Melbourne have the space to live and breathe so they can continue undertaking popular recreational activities. Let's not suffocate our city by pouring concrete over our open spaces which act as our lungs; pumping the oxygen through the veins of our community. Let's work to protect them. These spaces are not only valuable now, they are destined to become more valuable in future.

6. Tackling Climate Change through sustainable planning & development

Expanding the Urban Growth Boundary will mean increased congestion and increased reliance on fossil fuels and motor vehicles. This will result in increased carbon emissions. Climate change is the single most important issue of our time. We as a community and as policy makers must be doing everything we can to reduce carbon emissions on every single policy front, including planning and development. Our planning policies must include a strong emphasis on alternate and more environmentally friendly means of transport through increased support for our tram, train, bus and cycling networks. We must prioritise extending these networks into areas on the existing urban fringe, before building new communities that are further out and ever more remote from public transport.

If Australian cities continue to expand at the current rate over the next 10 to 15 years, air pollution will increase as much as 70% on adverse days compared to 1990 levels. Already, the cost of air pollution to Australia is high, with the human cost estimated at between \$3 billion and \$5.3 billion every year, and annual damage to materials, property and buildings of between \$3 billion and \$5 billion. This equates to 1% of GDP. Our concentrations of carbon monoxide are similar to or worse than US cities. Concentrations in Australian cities are more than double those found in Europe, and even more extreme compared with Asian cities, especially Singapore, Tokyo and Hong Kong (CSIRO 2004).

As pollution increases, the liveability of our city, and its attractiveness to investment and tourism, will deteriorate. People have come to accept urban sprawl and driving long distances as inevitable, but this has to change. Over the past quarter of a century the world community has been subjected to three key issues that will become drivers for change. They are peak oil, global heating, and the threat to human health caused by poor air quality (CSIRO 2004). I encourage the Victorian Government to consider these drivers of change as part of our long term planning strategy for this state.

Cars are the biggest cause of air pollution. Most Australians rely on cars to transport them around our sprawling cities, making us among the highest per capita air polluters in the world (CSIRO 2004). An extended Urban Boundary will undoubtedly lead to more cars on our roads, producing more carbon emissions. Since the 1950s the number of private cars across the country has risen dramatically and continues to do so. In 2003 there were 10.4 million registered cars and station wagons, compared with 769,000 in 1950 and 76,000 in 1920. This dramatic rise in private car ownership has been accompanied by a corresponding shift away from the use of urban public

transport (ABS 2005). In Melbourne there are now 500,000 more cars on Victorian roads than 10 years ago, with most being purchased by people living in Melbourne's rapidly growing outer fringe (Das 2008). In 1991, Melbournians owned 1.8 million cars and by 2005, car ownership had jumped by almost 700,000 vehicles to 2.45 million (Lucas & Millar 2008).

According to a study undertaken during the 90s, Melbourne has one of the highest ratios of road space to population of any city, with Melbournians taking up more road space and generating more emissions per capita than Londoners (Davidson 2008). In 2007 there were an average 13.37 million trips a day in Melbourne, with 12 million of those taken by car (Lucas 2008).

Increasing car ownership and vehicle trips increases greenhouse gas emissions. A recent report found Melbourne's transport, including cars, motorcycles, trucks; buses and trains produced the equivalent of 11 million tonnes of carbon dioxide a year, compared with 8.5 million tonnes in London, despite our city having half London's population. The research found Melbourne emitted 3.1 tonnes of carbon per person, compared with 1.2 tonnes per person in Greater London. In Victoria emissions have risen 27% since 1990, from 14.5 million tonnes of carbon dioxide to 18.5 million tonnes per year (Lucas & Millar 2008).

A major problem lurking for our economy is the burgeoning cost of traffic congestion in our major cities (Wharton 2005). Building new communities and new roads on the urban fringes of Melbourne will lead to more congestion, traffic which will ultimately hurt our economy.

According to the Victorian Competition and Efficiency Commission (2006:55);

"Congestion is a location and time dependant phenomenon that can occur when demand for use of transport infrastructure becomes excessive".

Congestion cost Australia \$12.7 billion in 1995 and is envisaged to increase to \$29.5 billion by 2015. In Melbourne, it cost \$2.7 billion in 1995. This congestion costs equated to \$840 per capita. It is estimated this cost will rise to \$8 billion by 2015, and equate to \$2100 per capita (Wharton 2005). Road congestion costs in Melbourne will reach nearly \$3 billion a year by 2020 under the present regime, a cost borne by every business and household (Buckley 2009).

Public transport currently plays a minor role in how this city gets around. Cars account for 91% of passenger kilometres, up from 89% in the mid 1970s, while public transport takes 9%, down from 16% in the mid 1970s (Moran 2008).

Serious economic, environmental and social problems are linked to automobile dependency. Economically, car dependence is not good for cities as auto cities have the highest ratio of total transport costs as a proportion of city wealth. The cost of a car over a lifetime is \$750,000. If a family uses one less car it could save this money for superannuation or spend it on other areas of the economy (Newman 2006).

I support the proposal for the construction of a Regional Rail Link, a 50 kilometre railway connection from west of Werribee to Southern Cross Station which will link the Melbourne-Geelong railway from west of Werribee to Southern Cross Station via the Melbourne-Ballarat railway, connecting at Deer Park. The Regional Rail Link received \$3.2 billion in the 2009 Federal Budget (DoPCD 2009:7).

It is public transport projects like these that should be the priority for connecting our already over spread city, instead of more roads and freeways. Motor vehicles are currently responsible for 80% of our transport sector's carbon emissions, with public transport being responsible for 3% (PTUA 2009A). The solution to slashing our carbon emissions and reducing car dependency rates lies in lifting public transport services.

Almost half of all new housing expected in Melbourne over the next decade will be built on the urban fringes where there is little access to public transport. A recent parliamentary report found that 1 in 100 residents in some of Melbourne's outer suburbs used only public transport to get to work (Dowling 2009).

There is a great deal of evidence which shows that when services are improved, more people use them. In 1991 a trial involving improving train services on the Sandringham line from every 20 minutes to every 15 resulted in a one-third increase in passengers. The Mont Albert tram line was extended to Box Hill in 2002 and as a result patronage on the far end of the tram line increased by over 60% between 2000 and 2004. Similarly, the extension of the St Albans suburban train line to Sydenham led to a 30% increase in patronage for the entire line between 2000 and 2004. Suburban train services were extended from Broadmeadows to Craigieburn in 2007, resulting in a significant increase in train frequencies to Craigieburn station. Within the first 12 months of the new service, patronage through Craigieburn station grew threefold (PTUA 2009B). The evidence clearly suggests that if we provide more options for people living on Melbourne's urban fringe to travel, they will use them. We must do everything we can do reduce car dependency and the solution lies in better public transport services.

Along with the transport sector, the Urban Growth Boundary review must consider the pressure that thousands of new residents and dwellings will place on our water and energy sector. Expert scientific evidence confirms human activity is altering the climate and is likely to lead to reduced rainfall and water availability, and more extreme weather events.

Melbourne's water storage levels are now at extremely low levels, with capacity now at 26.6% compared with 29.6% the same time last year. Three of our four catchments have recorded below average inflows; Upper Valley (22.3% below), O'Shannassy (8.7% below) and Maroondah (19.6% below) all recording well below average inflows. The Thomson dam has only slightly increased by 5.4% for the period June-July 2009. Overall our dams have recorded 8.1% below average inflow (Melbourne Water 2009).

Residential water consumption has reduced in recent times, with Melbournians on average now using 133 litres a day. Melbourne has now met the 155 litre target for eighteen consecutive weeks. But despite this, streamflow is still below average for this time of the year and more rain is required to help sustain storage increases (Melbourne Water 2009).

In 2006 our population was recorded to be 3.59 million (ABS 2006), with Australia having one of the highest per capita water consumption rates in the world. While two thirds of the people on Earth use less than 60 litres of water a day, the average Australian home uses twice that in a single shower. The city's average daily water use has recently been recorded at 1.040 million litres per day (Melbourne Water 2009A). Accommodating an ever increasing population will lead to more demand

on our already strained and over stretched water supply. With climate change expected to cause even lower rainfall in future, Melbourne will be faced with even less water supply for an expanding population. Accommodating an additional 70,000 people per year for the next five years will place great stress on our precious water supply.

Let's secure the environmental future of Melbourne by protecting our native woodland and grasslands from urban development. Let's hold the line on urban sprawl and focus our policy making energies on reducing carbon emissions, water consumption and encouraging more people to use public transport by improving its infrastructure, reliability and accessibility.

7. Securing Victoria's economic growth

We are now experiencing the deepest global economic crisis since the Great Depression. In these uncertain economic times it is vital the *Melbourne @ 5 Million* study considers the economic benefits of containing urban sprawl and that a strong plan is implemented to support and secure Victorian jobs.

The World Economy is expected to contract by 1.5% in 2009, with eight of our top ten major trading partners economies forecast to contract by 2%. Australia's GDP is forecast to contract by 0.5% in 2009-10, with recovery expected to gather pace from early 2010 (Australian Government 2009).

Despite Australia's economy being one of the best performing of any major advanced economy, we are not immune from the ravages of the global recession. The latest labour force figures showed that unemployment rose to 5.8% in June, up 0.1 percentage point from May (Swan 2009).

Securing our economy locally in the long term must start by holding the line on urban growth, unclogging our congested roads and protecting our open spaces. Latest figures show that 3.71 million Australians are now classified as obese, with the estimated cost to the nationally economy being \$58 billion, with Victoria bearing \$14.4 billion of the cost (NDSS 2008). The cost of air pollution to Australia is high, with the human cost estimated at between \$3 billion and \$5.3 billion every year, and annual damage to materials, property and buildings is between \$3 billion and \$5 billion. This equates to 1% of GDP. Congestion cost Australia \$12.7 billion in 1995 and is envisaged to increase to \$29.5 billion by 2015. In Melbourne, it cost \$2.7 billion in 1995. This congestion costs equated to \$840 per capita. It is estimated this cost will rise to \$8 billion by 2015, and equate to \$2100 per capita (Wharton 2005). Road congestion costs in Melbourne will reach nearly \$3 billion a year by 2020 under the present regime, a cost borne by every business and household (Buckley 2009).

Obesity, congestion and air pollution are all anchors that are weighing our economy down. Expanding the Urban Growth Boundary will add further shackles to achieving economic growth in these uncertain times by fuelling each of these issues. By addressing them directly we are not only securing our long term growth, but also supporting and creating jobs in the short term to see us through the global recession.

Investment in public transport services creates more jobs than spending the same amount on roads, as the construction of roads is mainly undertaken by machines. This is especially the case when the

rolling stock and vehicles are manufactured locally, as our trains were until the system was privatised. A report by Environment Victoria in 2009 indicates that by manufacturing 50% of the Victorian Transport Plan's envisaged new rolling stock in Victoria, over 9,000 'green jobs' would be created (PTUA 2009:48). The Werribee Rail Link project will support up to 10,000 direct and indirect jobs, which will boost economic activity in Melbourne and regional Victoria during the global recession (PM 2009). Funding and undertaking other similar public transport and infrastructure works will create and support further jobs during these difficult economic times while securing the long term transport infrastructure we are going to need.

Expansion of public transport services attracts fare-paying passengers, which generates additional ongoing revenue to offset the cost of providing the service. Successful public transport systems, like Toronto, generate sufficient patronage to recover at least 80% of their operating costs despite having cheap fares. Recovery cost in Melbourne can be improved from its current 30% to 40% range. More must be done to encourage patronage outside peak hours which will again encourage more sustainable modes of transport while improving recovery costs (PTUA 2009:48).

CSIRO modelling suggests that changing to a green economy will create at least 33,000 new jobs in manufacturing, 77,000 jobs in transport and 145,000 jobs in construction nationally over ten years. The Victorian Government's \$316 million skill reform package will boost Victoria's vocational education and training to produce highly skilled workers who can adapt to new industries (Premier 2009B). Practical Australian Government programs are already helping to reduce our emissions while supporting jobs.

The *Energy Efficient Homes Program*, for example, will install free ceiling insulation in around 2.7 million Australian homes and help reduce our carbon emissions by 49.4 million tonnes by 2020 (ALP 2009). Increasing our renewable energy target will provide support for dozens of renewable energy projects and will generate jobs while increasing renewable electricity for Australian homes (ALP 2007:7).

Securing Victoria's economic future begins with addressing the issues that are currently holding us back; tackling congestion through the construction of increased public transport services, addressing climate change through protecting our open spaces, urban fringe grasslands and also investing in renewable energy and more sustainable housing. The *Nation Building Economic Stimulus Plan* will secure jobs, while upgrading the infrastructure we are going to need for tomorrow. Furthermore it is more expensive and therefore damaging to the Victorian economy to build homes on the fringes of Melbourne, rather than in existing suburbs. According to a report commissioned by the Victorian Department of Planning, for every 1000 dwellings, the cost for infill development (in existing suburbs) is \$309 million and the cost of fringe developments is \$653 million (Dowling & Lucas 2009B). The report finds that the total cost of building homes in new outer suburbs is more than double that of building in existing areas, due to infrastructure costs such as power, water and transport, as well as higher health costs and carbon emissions.

Based on this report, building 134,000 new homes in the next 20 years on Melbourne's urban fringe, as proposed by the State Government, will cost Victorians more than \$40 billion over coming decades compared with the cost of building within existing suburbs.

8. Where will people go?

Naturally an objection will be raised that the population is increasing and will have to live somewhere. But the fact is that population increase for Melbourne has been encouraged and welcomed, and it is time this stopped.

Melbourne at five million is too many. It is time we aimed to stabilise Melbourne's population. Once this more desirable state of affairs has been achieved, there would be no difficulty in housing the population without either the need for urban sprawl or to block out the sun with high rise horrors. In a stable, sustainable, city, when people leave or die others take their places, and there is room for all. In the meantime, if increasing population has difficulty finding housing, they can choose to live in other cities or regional towns rather than come to Melbourne, or we could reverse the trend towards fewer people per household. For a century now we have been moving towards having bigger houses- McMansions – with fewer people living in them. The mean Australian household size in 1911 was over 4.5, and in 1961 was over 3.5. It is now a bit over 2.5. It would be no bad thing for example if students or elderly relatives were to live with families whose children have grown up and left the household.

9. Recommendations

Recommendation 1: The Urban Growth Boundary should not be expanded.

Recommendation 2: Environmentally significant grasslands and ecologically sensitive woodlands on Melbourne's urban fringe should be protected and enhanced.

Recommendation 3: Remaining significant public open spaces throughout metropolitan Melbourne should be protected from development and permanently reserved.

Recommendation 4: The State Government and local councils should extensively consult with, and respect the views, of local communities on planning issues.

Recommendation 5: The State Government should strongly invest in improving public transport accessibility, frequency and patronage throughout Melbourne. Particular emphasis should be paid to communities on the urban fringe that are heavily car dependent and who currently have fewer public transport options than inner city suburbs.

Recommendation 6: Secure our long term economic and social future by investing in public transport infrastructure, energy efficiency in buildings and renewable energy projects which tackle climate change and support jobs.

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