

Plan Melbourne: Can Outer Suburbs Become 20 Minute Neighbourhoods?

Carolyn Whitzman, Danita Tucker, Andrew Bishop, Andreeanne Doyon, Cait Jones, Tamara Lowen, Elissa McMillan

Faculty of Architecture, Building and Planning, University of Melbourne

Abstract: There is increasing Australian and international interest in planning for health and liveability. One direction of the draft metropolitan Melbourne planning strategy, the '20 Minute Neighbourhood', has incited particular interest. The notion is that all Melburnians should have access to services and jobs they need within a 20 minute walking, cycling or public transport journey from home.

While Melbourne's inner suburbs may have the pre-conditions of 20 minute neighbourhood, its rapidly growing outer suburbs are much more of a challenge. The City of Wyndham, 40 km southwest of the CBD, is Australia's fastest growing outer suburb. Its two train stations serve more than 180,000 residents spread out over 541.6 km².

One hundred and seventy five undergraduate students in an introductory planning subject have undertaken walkability assessments and street user head counts near the stations, a street survey of residents, and policy analysis. The data suggests that, although 20 minute neighbourhoods are possible throughout the metropolitan area, the new metropolitan planning strategy is likely to move outer suburbs further away from this ideal.

Introduction: Liveability and the 20 Minute Neighbourhood

The development of the planning profession in the late 19th century was based in the goal of affordable and appropriate housing with accessibility to jobs and essential social infrastructure such as schools and shops. This goal has been promoted through a succession of mechanisms: zoning to increase the distance between noxious industries and housing; replacing inner city slums with public housing; developing self-sufficient 'garden suburbs', linked by mass transit, with a mix of housing, services and employment; and building urban highways to allow lower density housing with access to jobs (Hall, 2002). One of the newer ways to analyse the success of planning in achieving the goal of access balanced with healthy living is 'liveability' (Pacione, 1990).

Since the publication of the *Liveable Communities* national policy statement by the Planning Institute of Australia (2004), liveability has become an increasingly powerful discourse within Australian planning policy. According to the federal government's recently disbanded Major Cities Unit (2010: 13):

'Liveable cities are socially inclusive, affordable, accessible, healthy, safe and resilient to the impacts of climate change. They have attractive built and natural environments. Liveable cities provide choice and opportunity for people to live their lives, and raise their families, to their fullest potential.'

The Major Cities Unit links liveability to productivity, as does a recent inquiry into enhancing Victoria's liveability (Victorian Competition and Efficiency Commission, 2008). *Plan Melbourne*, the latest metropolitan strategy, sees 'liveable neighbourhoods and suburbs' as one of the 'competitive advantages that drive our city's current success' (Victorian State Government, 2013: 3).

A key liveability-related mechanism proposed in *Plan Melbourne* is the 'creation of a city of 20 minute neighbourhoods', intended to 'help improve health and wellbeing, reduce travel costs and traffic congestion and reduce vehicle emissions'. This direction is intended to combat a growing divide between neighbourhoods with 'good access to a range of services and facilities', including local shops and services, day care centres and schools, local gathering places and parks, and employment centres, and those 'that lack convenient access' (ibid: 98). The 20 minute neighbourhood concept is borrowed from the City of Portland in the US, where the *Portland Plan* lays out a measurable neighbourhood based strategy where 'quality, reliable basic services must be provided for all' within 20 minutes active transport - walking, transit or cycling - distance (City of Portland, 2012, pp. 6, 84). The indicator for success is simple: a 'complete neighbourhood' is one with 20 minute active transport access to:

'a variety of housing options, grocery stores and other commercial services, quality public schools, public open spaces and recreational facilities, affordable achievable transportation options, and civic amenities. An important element of a complete neighbourhood is that it is built at a walkable and bikeable human scale and meets the needs of all ages and abilities.' (ibid, p. 127).

The *Portland Plan* says that only 45% of its residents currently live in 'complete neighbourhoods', which are mostly located in the inner city. The City of Portland has a goal of 80% of residents living within complete neighbourhoods by 2035, with five year neighbourhood strategies aimed at filling in the infrastructure gaps (ibid, p. 127).

This paper describes a collective attempt of one lecturer, six tutors, and 175 undergraduate students, to explore whether the noble *Plan Melbourne* aspiration of a 20 minute neighbourhood can be achieved in the outer suburbs of Melbourne, and if so, how that might be accomplished.

Context for the Research

'Cities: from Local to Global' is a second year undergraduate subject at Melbourne University, intended as a generalist introduction to urban planning. As taught by the lead author, the subject has always had a strong problem solving focus, with real life government 'clients' asking questions that the students can answer using basic field research techniques (Whitzman et al, 2012). The field research is supplemented by articles on urban theory and planning, and guest lectures by researchers and practitioners.

The students complete three assignments. In the first assignment, focusing on the local scale, the students undertake a walkability audit and road user 'head count' in a site, before writing an essay on how to improve walkability, cycle-ability, or use of public space in that site. In the second assignment, focused on the metropolitan scale, students undertake a street survey of local residents on social infrastructure access and preferences, then review local and metropolitan-level plans to write an essay on how well they think integrated planning is working to meet people's needs. In the third and final assignment, students describe a good practice from a city other than Melbourne, and explain in poster format how it could feasibly be applied to a problem identified in one of the first two assignments.

In 2013, the lead author was co-chairing a government-research partnership called Place, Health and Liveability, in which the state government and Melbourne University are examining health impacts of current planning policies and promoting integrated planning for health. This work was intended to inform *Plan Melbourne*. The focus of the project is the North and West Metropolitan Melbourne Region, where four of Melbourne's five outer suburban growth corridors are located. The City of Wyndham, the fastest growing municipality in Australia, seemed a perfect choice to locate an intensive piece of teaching based research.

The Case Study: Wyndham

The City of Wyndham is located 40 kilometres southwest of the Melbourne CBD (Figure 1). The municipality covers 541.6 km², with a low population density of 3.3 people/ha (.id, 2013). In 2011-2012, Wyndham experienced a 7.1% annual population increase, equating to 235 people per week and over 5,000 new dwellings a year (ABS, 2013; Wyndham City, 2013a: 5). The 2011 census population was 168,552 (DPCD, 2012). Wyndham has a much larger proportion of families with young children than the metropolitan Melbourne average, and demographic analysis suggests that 70 babies are being born in the municipality each week (Wyndham City, 2013a: 5). By the year 2031, Wyndham is forecast to have a population of 332,000 and could reach 460,000 when all residential zoned land is developed (.id, 2013). The rationale for developing this much land in Wyndham is housing affordability, but 15% of households spend more than 30% of their gross household income on mortgage repayments, as compared to the state average of 10% (ABS, 2013).

At the time of the research, there were only two train stations serving Wyndham: Hoppers Crossing and Werribee; a third station, Williams Landing, has since opened (Figure 2). The train line serves the south-eastern part of Wyndham, while major parts of north and west Wyndham have recently been released for development.



Figure 1: Location of Wyndham in Melbourne
Source: DPCD, 2010



Figure 2: Map of Wyndham showing railway stations (red boxes)
Source: VEC, 2011

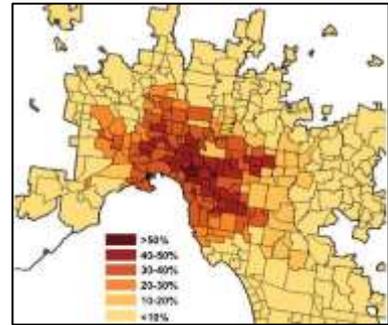


Figure 3: Percentage of jobs that can be reached in a 60 minute trip by public transport
Source: Mares et al., 2013

Unemployment rates of 6.3% in Wyndham are higher than the metropolitan average of 5.5% (id, 2013). Furthermore, as can be seen in Figure 3, less than 10% of the total jobs in metropolitan Melbourne can be accessed by Wyndham residents within a 60 minute public transport trip. Fewer than one third of Wyndham residents work within the municipality. The municipality recognizes that the balance of the resident workforce leaving the municipality to work at other destinations places significant stress on roads, public transport services, the environment and community wellbeing, as well as municipal finances (Wyndham City Council, 2012).

In response to these concerns, Wyndham Council was the first in Australia to produce a *Growth Management Strategy*, using a series of public meetings from August 2012 onwards to engage with residents. Priorities included upgrading of roads and access to freeways, better bus and train services, new schools and kindergartens, more police stationed locally, parks and sporting facilities, and local jobs in strong economy built around Werribee Centre (Wyndham City Council, 2013a). More recently, *Plan Melbourne* has designated the area between Hopper's Crossing and Werribee train stations as one of six 'National Employment Clusters' that will concentrate education, health and other knowledge economy employment closer to new housing (Victorian State Government, 2013: 28).

Wyndham's *Health, Wellbeing and Safety Plan* (2010: 3), noting the need for better employment options, for its young and multicultural population (Wyndham has the largest refugee community in the western suburbs), and the growing pockets of low employment and low educational achievement in the municipality, argues that 'the greatest challenge will be the capacity of Wyndham City to keep up with the demand for infrastructure and services, and to maintain and build the sense of community needed to assure the safety and wellbeing of people'. Priorities for the health and wellbeing plan include promoting active transport modes of walking, cycling and public transport, which can 'almost halve the risk of cardiovascular disease, reduce the risk of diabetes, osteoporosis and cancer and alleviate anxiety and depression' (ibid: 16). In relation to these aims, the federal and state governments have funded a Healthy Community initiative from December 2011 to June 2014 to embed health and wellbeing principles within Council's strategic planning, policies, programs, and services (Hill, 2012).

Methods

The 175 students undertook two 2 hour fieldwork shifts in Wyndham, in various locations within a one kilometre radius of two train stations: Hopper's Crossing and Werribee. Students worked in teams of two, during afternoon rush hour (between 3 and 7 p.m. on Thursday, March 21 or Friday, March 22 for the first exercise, and the same hours and weekdays on April 18 and 19 for the second exercise). As part of ethics approval, students consented to the use of their data for academic and policy purposes, and provided plain language information sheets on the research to Wyndham residents that included the project's affiliation with Melbourne University.

There were two aspects to the walkability/ cycle-ability fieldwork: a built environment audit and an activity observation sheet. Wyndham Council staff mandated the use of the SPACES tool (Pikora, 2002), which contains 37 items, including less relevant factors such as 'average height of verge trees' and 'how alike is building design'. The tutors selected 10 key audit features including 'negotiability of path for pram/wheelchair', 'types of features present', 'crossing type', and 'presence of crossing aid' to analyse the walkability of specific locations, and assigned an aggregate score for each street segment (block), based on the average of student ratings for these 10 elements. While one student undertook

the built environment audit, the other student conducted a 'road user' count of pedestrians, cyclists, cars, and other vehicles (including wheelchairs).

For the second fieldwork assignment, on travel distances between Wyndham residents' homes and schools, employment and services, as well as infrastructure preferences, each team of two students was expected to carry out 10 street surveys. A total of 804 local residents completed surveys. The residents surveyed were representative of the municipality, in terms of age, gender, and household income.

For the final assignment, students were asked to produce a poster, focusing on one good idea from another city and how it might be applied to Wyndham. Thirty students who completed particularly innovative and feasible ideas had their posters made into a travelling exhibit, that was launched at the University, and then travelled to Wyndham libraries and community centres (including the City Hall), along with the tutors' analysis of student data.

Findings

Walkability, Cycle-ability and Use of Public Space

Results of the audits as well as the street user head counts identify key barriers to Wyndham embodying 20 minute neighbourhood principles. While the immediate vicinities of Werribee and Hoppers Crossing Stations vary in terms of traffic and built environment, the high level of car use in and around these two train stations, as well as low levels of bus service, are major impediments to walking and cycling to and from train stations.



Figure 4: Watton Street, Werribee, has good pedestrian amenity despite the reliance on cars for travel. (Source: Danita Tucker)



Figure 5: Synnot Street, Werribee located 250 metres from Werribee Station has poor pedestrian amenity and is dominated by cars. (Source: Google Maps, 2013)

The area around Werribee Station retains elements of traditional town centre pedestrian orientation (Figures 4-5), but its charm and accessibility is diminished by overwhelming car traffic on surrounding streets (Figures 6-8). Station Place, a cul de sac with the main entrance to Werribee Station, has more pedestrians than cars, but the immediately adjacent streets are dominated by car traffic. Less than three blocks from the station, 'the Princes Highway [known as Synnot Street in Werribee Centre] facilitated 1135 cars [in one hour], meanwhile a mere 11 people were seen walking and only 7 buses' (Ellie Dewan).

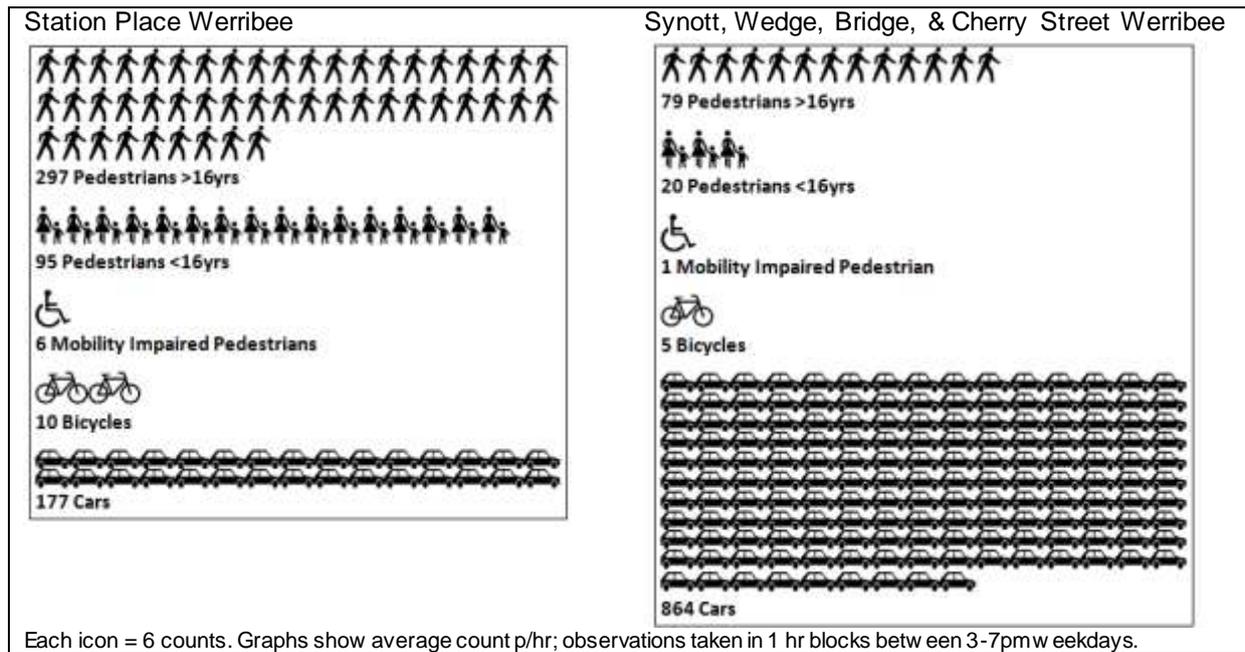


Figure 6: Pedestrian, Car and Bicycle Counts in Central Werribee

The immediate vicinity of Werribee Station is dominated by car parks – immediately south, west and east of the station (Figure 7). Several students noted that the bus services leading to the station only operated two to three services an hour. With the exception of two new developments, there is no higher density housing located near the station. Thus the only option for most nearby residents is to drive to the station and town centre, which diminishes safety for pedestrians and cyclists. Despite what appeared to be new and well-used bicycle parking enclosures near both stations, the few cyclists sighted were using the footpath: ‘A vet science student... rode on the footpath... as she felt it was too dangerous to ride on the road... [as did] Sam, a teenager’ (Loretta Dridan). Less than 400 metres from Werribee Station, one student wrote that pedestrians and pedestrian amenity were completely absent:

‘The entire length of Beamish Street was residential... together with missing footpaths... [it] gave the impression that the street was simply a void between private dwellings’ (Savas Petrakis).



Figure 7: Aerial photograph illustrating the urban morphology of Central Werribee (Map source: Oz Aerial, 2011)

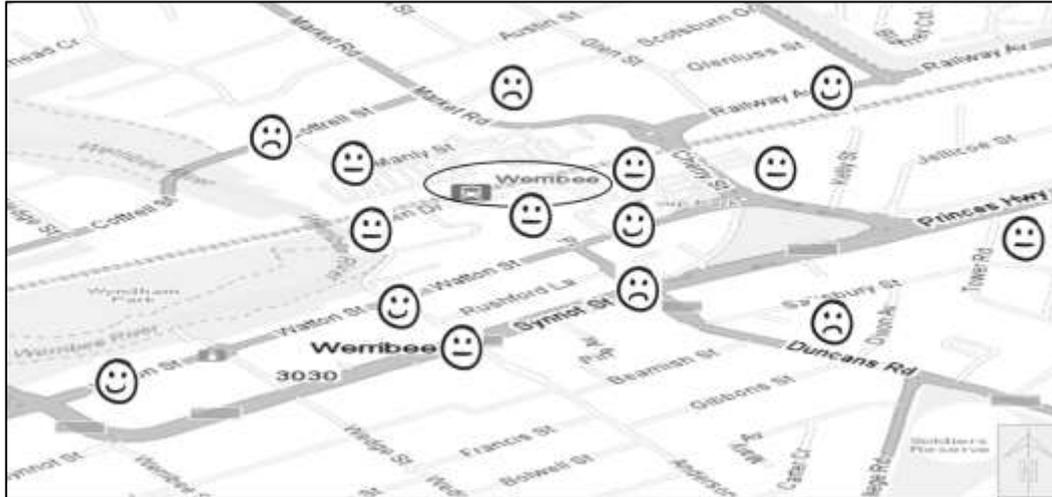


Figure 8: Results of a Walkability Audit of Central Werribee undertaken in March 2013 (Map source: Google Maps, 2013)

Central Werribee was enjoyed as an urban environment by a number of students, although a large proportion of the pedestrians noted were walking to 'the car park and few people were waiting for the bus that never seemed to come' (Bochu Liu). But Hoppers Crossing seemed to dumbfound students tasked with auditing it (Figures 9-13). There is a small strip shopping centre and park immediately north-west of the station, but the rest of the local environment is dominated by four to six lane arterial roads with 60 km speed limits and few pedestrian crossings, large enclosed shopping plazas, and self-enclosed residential developments with large single storey homes (Figures 9-10).



Figure 9: Aerial photograph illustrating the urban morphology of central Werribee (Map source: Oz Aerial, 2011)

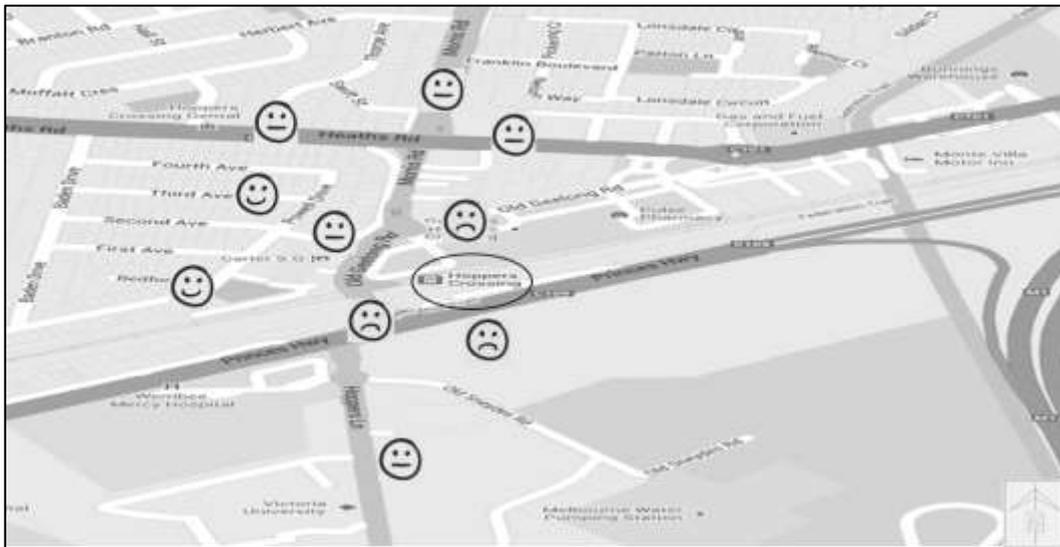


Figure 10: Results of a Walkability Audit of Hoppers Crossing undertaken in March 2013 (Map source: Google Maps, 2013)

Recent development south of Hoppers Crossing Station is particularly dire, with very limited pedestrian crossing capacity and very heavy car traffic (Figures 11-14). One researcher took 15 minutes to legally cross traverse a 200 metre stretch between the station and Hopper's Lane (Figure 12). Major new health and educational services – the Werribee campus of Mercy Hospital, a selective entry public high school, and regional campuses of the University of Melbourne and Victoria University- are unsafe to access via active transport (Figure 14). The observations suggested a large number of students and medical workers were illegally jaywalking across Princes Highway to reach the station. One student wrote of this area:

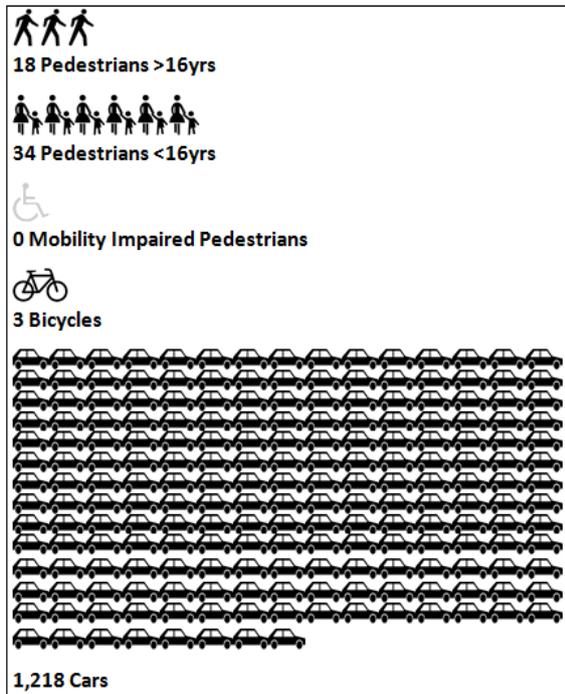
'Two buildings that claimed to be hospitals were as lifeless as mortuaries. And a university but no students to be seen anywhere... where were the people?' (Calvin Ze Hao Yong)



Figure 11: Old Geelong Road, Hoppers Crossing adjacent to Hoppers Crossing train station and strip shops has poor pedestrian amenity (Courtesy: Danita Tucker)



Figure 12: Hoppers Lane and Old Geelong Road intersection, Hoppers Crossing. Pedestrians are required to use this difficult and pedestrian unfriendly intersection to move from the train station to the education and health precincts south of the station. (Courtesy: Carolyn Whitzman)



Each icon = 6 counts. Graphs show average count p/hr; observations taken in 1 hr blocks between 3-7pm weekdays

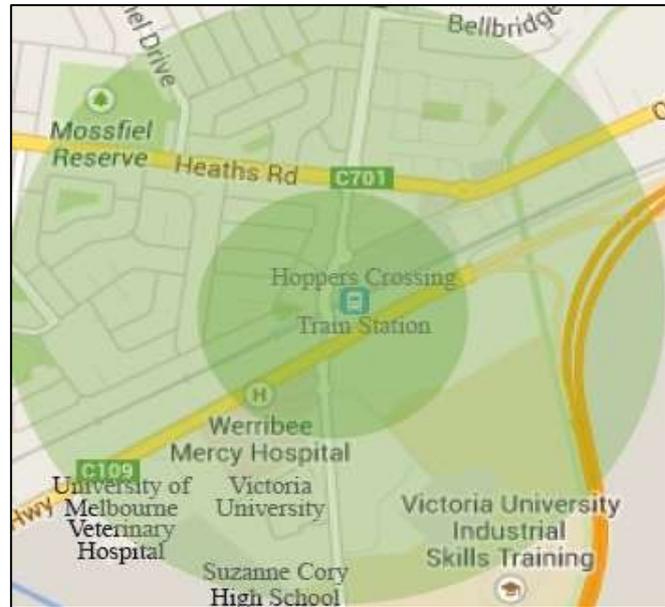


Figure 14: Map capturing the health & educational facilities within 400m and 1km catchment south of Hoppers Crossing Station (Map source: Google Maps, 2013)

Figure 13: Pedestrian, Car and Bicycle Counts on Old Geelong Road, South of Hoppers Crossing Station

Access to Jobs and Services

In the second assignment, students undertook a street survey of Wyndham residents, asking about proximity to employment, schools, and services in terms of travel times, and also about priorities for local infrastructure improvement. When asked why they moved to Wyndham, the most commonly selected reason was housing affordability, with proximity to family and friends as the second most common response (Figure 15). Of the 74% of respondents that worked outside the home, only 30% experience a one way commute of less than 20 minutes, with 19% experiencing a one way commute over an hour (Figure 16). These long commutes are caused as much by poor train service and road congestion as they are by distance, as described by one student:

"It takes you 45 minutes to get to Laverton?! I asked the... resident, hardly believing the 8km morning commute could take so long. Upon completion of my surveys at Hopper's Crossing, I realized however that he was one of the lucky ones' (Alexander Pritte).

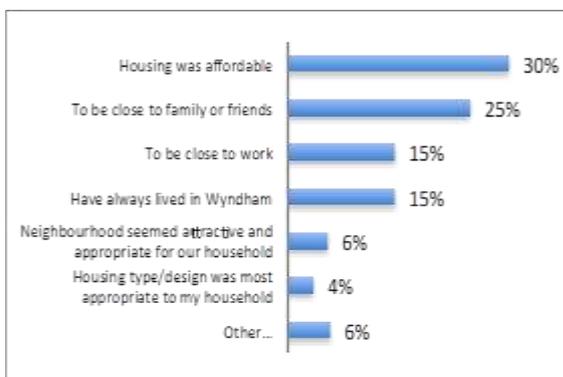


Figure 15: Most important reason for moving to Wyndham

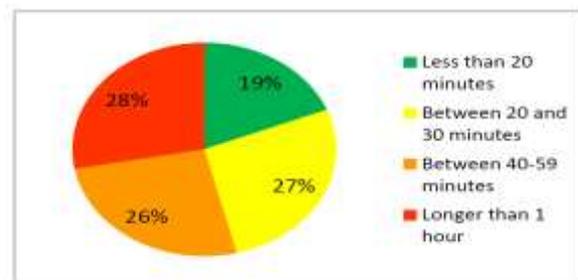


Figure 16: Respondents' reported travel time to work

A little less than 30% of respondents reported that they have school aged children (although 50% of households in Wyndham have children, a large proportion are pre-school children [id., 2013]). Of those, 46% said it would take less than 20 minutes for their youngest child to walk to school. However, 15% estimated that it would take over 40 minutes, and 16% said their child had never walked or cycled to school (Figure 17).

The survey results reveal that 87% of respondents report that they currently have access to shops within 20 minutes' walk of their home. However, only 61% state that they have access to frequent buses, train stations or other public transport, and only 28% access to good employment opportunities within 20 minutes' walk. Only 54% reported that 'childcare centres or primary schools that I would like my children to attend' were within a 20 minute walk of their home, and only 18% said the same for 'tertiary or adult life-long education that interests me' (Figure 18).

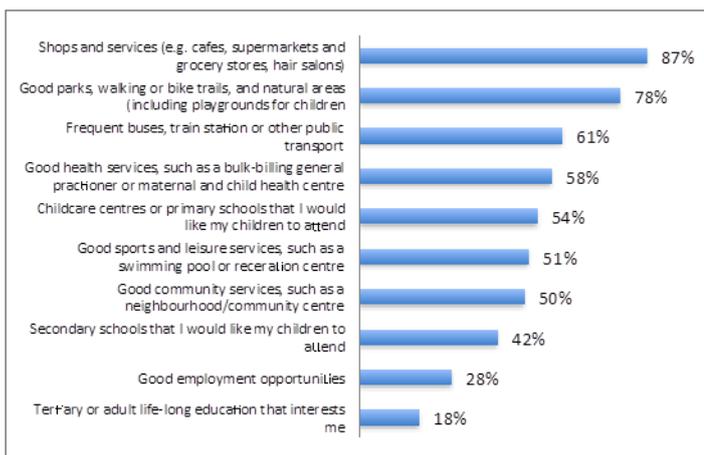
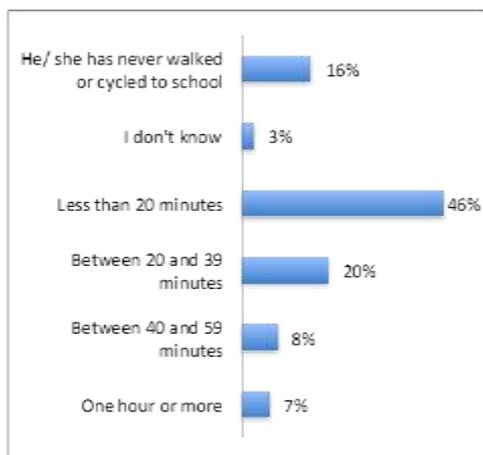


Figure 17: Respondents' estimation of time it would take their youngest school age child to walk to school

Figure 18: Services that respondents report are currently within a 20 minute walk of their home

This absence of local employment and adult education is particularly concerning because of the high numbers of refugees and new migrants with poor English language skills settling in Wyndham:

'I met a man at Hopper Crossing train station on his way to English language lessons in nearby Werribee. He is a recent arrival from Sri Lanka, housed by the Red Cross, unemployed and unqualified.' (James Dear).

When asked their top three priorities for improvement in Wyndham, over half the respondents selected 'more or more frequent buses, train stations and other public transport', 46% indicated 'more shops or services', and 35% 'more or better employment opportunities' (Figure 19).

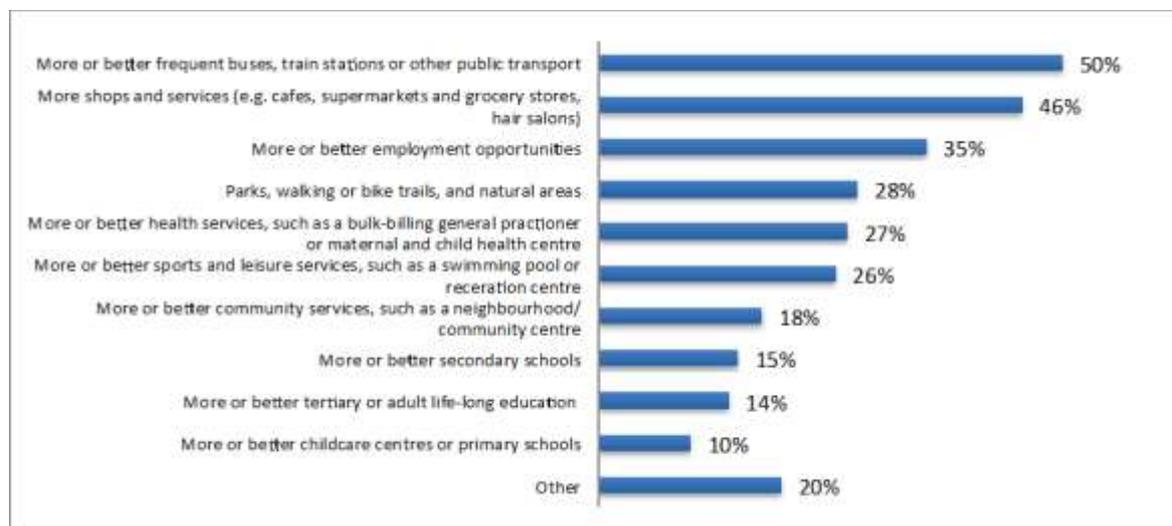


Figure 19: Respondents' top 3 services they would most like within a 20 minute walk of their home

Student Ideas for Improvement in Wyndham

With poor active transport access and long distances to destinations, how can Wyndham achieve the 20 minute neighbourhood goal? *Plan Melbourne's* major infrastructure commitment in relation to a 'more connected Melbourne' is the construction of an \$8 billion central city road tunnel, and generally improving 'roads, suburban rail and bus networks in growth areas and outer suburbs', in that order of priority. Considerably below new highways and arterial roads, in terms of concrete commitments, is to 'make neighbourhoods pedestrian friendly; and create a network of high-quality cycling links' (Victorian State Government, 2013: 71). Beyond the six National Employment Centres, mechanisms to provide integrated planning of jobs and services at the neighbourhood level – are disappointingly vague in *Plan Melbourne*. Through the final assessment task, students offered alternative ideas from cities around the world for improving 20 minute neighbourhood planning in Wyndham.

As a number of students pointed out, the goals of more services and more employment opportunities can be seen as complementary: 'Lack of community services to some extent is a proxy for lack of local jobs, since community services have become the biggest source of employment growth' (Liu Bochu). For example, while there are currently 20 primary schools, 13 secondary schools, and two TAFE campuses in Wyndham, these are not meeting the demand of the current population (Wyndham City Council, 2013b: 53). The City of Wyndham (2013b) estimates that in order to meet demand, an additional 25 government schools will need to be constructed – at least one or two per year until 2031.

There was certainly support for the notion of a tertiary education and health service hub in East Werribee, with associated student housing, which would not only offer increased local educational opportunities, but also local employment. This was perhaps most colourfully expressed by student William Forrest:

'Students not only spend money in an area, they bring it to life both day and night, gentrifying an area with their demand for cafes, bars, gyms and housing... these social interactions provide economic stimulus and add to social cohesion...Wyndham and in particular Werribee can be likened to a man who has forgotten to put on his pants: high population growth in the area, primary schools, shops, good bus routes, a tourist draw card such as the zoo and a highly diverse population are the jacket, shirt, socks and shoes but without a major educational institution, the municipality, especially one as large as Wyndham, is not fully dressed.'

Responding to the number one concern of residents, transport, several students suggested a well-developed network of bus rapid transport and cycle paths linked to trains. They also pointed out the absence of public spaces and destinations that encourage people to participate in public life. Student Lu Zhou suggested Play Streets, based on a New York City program replicated throughout the US, as a way to increase both children and adult use of streets. Play streets are a temporary space for young people to play, created by officially closing off local streets to traffic at scheduled times, allowing a safe, engaging place to be active (Partnership for a Healthier America, 2013). A similar idea from the UK is that of Home Zones, suggested by student Austin Kerne, in which residential streets are designed to be used by motor vehicles, but with a priority given to social uses such as children's play, cycling and walking (Department for Transport UK, 2005).

To achieve the 20 minute city, Wyndham's lack of affordable and diverse housing also needs to be addressed. Student Nick Bergin suggests the need for a holistic approach to affordable living, which

'...accounts for the interconnectedness of multiple factors, such as access to housing, parks and open space, social services, health services, employment and education in determining affordability, rather than strictly 'housing price'. In understanding liveability through this lens, an opportunity for urban planning to influence affordability beyond simply 'building more houses' to decrease demand becomes possible.'

For this type of affordable living to occur, a change is required in how suburbs of Wyndham are currently being developed. Student Ellie Dewan suggested implementing an inclusionary zoning policy for 'integrating affordable housing types into all communities' and 'density bonuses' to developers to create affordable housing and mixed use buildings. Additionally, student Jasmina McKenna acknowledged that the successful integration of social infrastructure depends on the right timing, being most successful if implemented well ahead of people coming in.

What Next for Wyndham – and Melbourne’s outer suburbs?

The research undertaken by the students in ‘Cities from Local to Global’ indicates that the 180,000 residents of Wyndham are a long way from attaining a 20 minute neighbourhood ideal. What is particularly disturbing is the increasing gulf between the aspirations of successive metropolitan strategies and actual local planning. As Newton (2012) and Howley et al (2009) point out, the rhetoric of liveability and the realities of sustainability may collide, particularly if liveability becomes conflated, as it appears to be in *Plan Melbourne*, with ‘[protecting] our unique neighbourhoods from residential densification’, along with ‘improving access to job rich areas’ through new highways, along with widening arterial roads and interchanges, such as the Snydes Road interchange halfway between Hopper’s Crossing and Werribee train stations (Victorian State Government, 2013: 103, 81, 84).

Local, state, and national policies ‘talk the talk’ in terms of the importance of affordable and diverse housing with access to jobs and services on the basis of health, liveability and productivity. However, unlike *The Portland Plan*, which succeeds a 30 year plan with an inelastic growth boundary, metropolitan Melbourne is now enduring its fifth 30-40 year timeframe metropolitan strategy in as many decades. *The Portland Plan* has clear monitoring and evaluation procedures, and links infrastructure funding to neighbourhood planning. In contrast, past Melbourne metropolitan plans have been characterised by short term political agendas (with a new metropolitan strategy succeeding each change in government), and little real linkage to public transport, education, health, social service, or social housing integrated planning or funding mechanisms (Mees, 2011).

Plan Melbourne is no exception to this sorry rule. Rather than prioritising active transport access between nearby housing and new employment centres, it proposes even greater dependence on cars as a means of accessing these jobs and services. Rather than concrete targets for affordable and diverse housing for university students, nurses, and service workers near the East Werribee employment cluster, the plan does not even provide a reference to housing in its map (Figure 20).

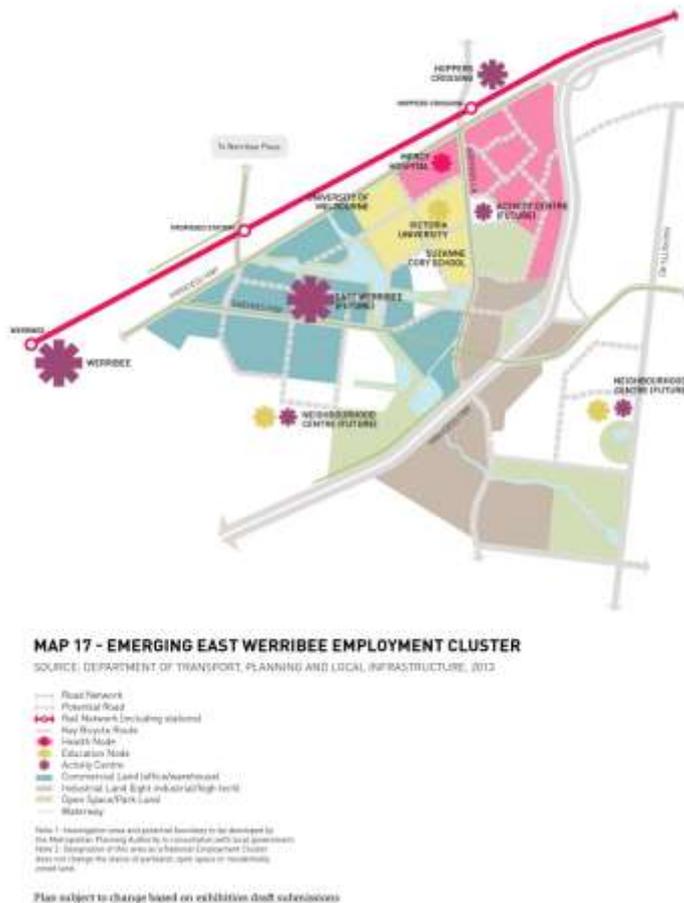


Figure 20. East Werribee Employment Cluster (source: Victorian State Government, 2013, Map 17)

Wyndham City Council's independent capacity to address its huge infrastructure shortfalls is limited. Not only are they dependent on state and federal funding for infrastructure, Council staff are overwhelmed by the scale of development. At one meeting in March 2013, the lead author was given a dozen draft Precinct Structure Plans, each for new communities of between 2,000 and 10,000 units under development, and asked what the health and liveability priorities for each might be. Neither the state-level Growth Areas Authority nor the local government strategic planners were at the meeting, convened by the Healthy Community Initiative. Nor were the Healthy Community Initiative or Council research officers able to analyse or use the student data which they had asked to be generated. Staff did not use the data on street users to get a sense of which spaces were most used by pedestrians and thus to prioritize pedestrian improvements accordingly. Despite assurances at the beginning of the process, Wyndham did not analyse the street survey data or use it in its recent report on infrastructure priorities. In general, the sense we received in working with Wyndham City Council was that they were overwhelmed by the pace of development and could not easily work in a proactive way to develop integrated policies or priorities for healthier or more liveable communities. There is no indication in *Plan Melbourne* that Wyndham Council's recent attempt to slow down growth has had an impact with state government (who are the final decision-makers in this matter).

Is there a better way? Given the very high levels of traffic congestion witnessed by students, and the projected growth rates of Wyndham, relying on new highways and arterial road widening will not meet the needs of residents. Improving active travel choices, particularly walking and public transport, is not impossible. Some parts of Wyndham, notably Werribee Central, have pedestrian friendly areas, which could be expanded. Traffic calming between the two train stations and the proposed East Werribee employment precinct is not unreasonable, given the highway duplication with the M1 freeway less than a kilometre to the south.

Higher density housing near train stations, with community services and educational facilities at the ground level or nearby, would also increase residents' access to jobs, educational opportunities, and rapid public transport. There are two new rail lines, and at least eight new stations, that have been promised to Wyndham in various transport strategies. Developing rail systems as a priority would assist with a modal shift from cars, particularly if they were linked to bus services, along designated lanes during rush hours, which provided at least four services an hour. Aside from the East Werribee Employment Cluster, a new network of public primary school hubs with co-located childcare, maternal and child health services, kindergartens, community centres, and adult English as a Second Language and other lifelong learning opportunities, would both create local employment opportunities and improve much needed services throughout Wyndham. Replacing large ground level parking lots near stations with parking garages, and prioritising street shopping strips over big box retail, would also assist in helping small business development and improving local walkability and social cohesion.

Student Austin Kurne says:

'As the debate between sprawl and consolidation continues, it is the residents of these 'battleground suburbs' that are caught in the crossfire, experiencing the full force of the actions, or the inactions, of government at all scales'.

The pace of growth in outer suburbs, while rapid, is not an excuse for government inaction on the basic planning goal of affordable and appropriate housing with easy access to jobs and services. Nor is the ideal of a 20 minute neighbourhood unattainable in any part of metropolitan Melbourne. All it would take is long-term political will, integrated planning, and a commitment to adequate infrastructure funding – qualities which are sorely lacking in Victoria and Australia at present.

References

ABS [Australian Bureau of Statistics] (2013) '2011 Quick Stats-Wyndham'. Downloaded February 20, 2013 from: <http://www.censusdata.abs.gov.au/>

City of Portland (2012) *The Portland Plan* (Portland, City of Portland).

Department for Transport UK (2005) *Home Zones: challenging the future of our streets* (London: Department for Transport).

DPCD [Department of Planning and Community Development] (2010) 'Planning Schemes Online'. Downloaded February 20, 2013 from: <http://planningschemes.dpcd.vic.gov.au/>

(2012) 'Victoria in Future 2012'. Downloaded February 20, 2013 from: <http://www.dpcd.vic.gov.au/home/publications-and-research/urban-and-regional-research/census-2011/victoria-in-future-2012>

Google Maps (2013) 'Werribee Station' and 'Hopper's Crossing Station'. Downloaded February 20, 2013 from: <https://maps.google.com.au>

Hall, P. (2002) *Cities of Tomorrow* (Oxford: Blackwell).

Howley, P., Scott, M., Redmond, D. (2009). "Sustainability versus liveability: an investigation of neighbourhood satisfaction." *Journal of Environmental Planning and Management* 52(6): 847-864.

Hill, G. (2012) 'Wyndham Healthy Communities', Presentation at Thriving Neighbourhoods Conference, Melbourne, November 12, 2012.

.Id population demographics (2013). 'Wyndham Population Forecasts'. Downloaded February 23, 2013 from <http://forecast2.id.com.au/default.aspx?id=124&pg=5180>

Mares, P, Kelly, J.F., Harrison, C., O'Toole, M. (2013). 'Who lives where: Melbourne', in *Productive Cities Supplementary Maps, Report No. 2013-7* (Melbourne: Grattan Institute). Downloaded March 13, 2013 from: http://grattan.edu.au/static/files/assets/251d4dbc/190_who_lives_where_melbourne.pdf

Major Cities Unit (2010) *Our Cities Discussion Paper: a national strategy for the future of Australian cities* (Canberra, Commonwealth of Australia).

Mees, P. (2011) 'Who killed Melbourne 2030?' Paper presented at the State of Australian Cities Conference, Melbourne, 29 November–2 December, 2011.

Newton, P. (2012). "Liveable and sustainable? Socio-technical challenges for twenty-first-century cities." *Journal of Urban Technology* 19(1): 81-102.

OzAerial (2011) Maps of 'Werribee Station' and 'Hopper's Crossing Station'. Downloaded February 20, 2013 from: <http://www.ozaerial.com.au/>.

Pacione, M. (1990). "Urban Liveability: a review." *Urban Geography* 11(1): 1-30.

Partnerships for a Healthier America (2013) Play Streets website. Downloaded October 30, 2012 from: <http://ahealthieramerica.org/play-streets/>

Pikora, T (2002) *Survey of the Physical Environment in Local Neighbourhoods, SPACES Instrument: Observers Manual* (Perth: Promotion Evaluation Unit, Department of Public Health, University of Western Australia).

State of Australian Cities Conference 2013

Planning Institute of Australia (2004) *Liveable Communities: how the Commonwealth can foster sustainable cities and regions - a national policy statement by the Planning Institute of Australia* (Canberra: Planning Institute of Australia).

VEC [Victorian Electoral Commission] (2011) 'Wyndham City Profile'. Downloaded February 23, 2013 from: <https://www.vec.vic.gov.au/Government/wyndhamprofile.html>

Victorian Competition and Efficiency Commission (2008) *A State of Liveability: an inquiry into enhancing Victoria's liveability* (Melbourne, Victorian Competition and Efficiency Commission).

Victorian State Government (2013) Plan Melbourne metropolitan planning strategy [draft] (Melbourne: Victorian State Government).

Whitzman, C., Legacy, C., Harris, C. (2012) 'The Shock of the Huge: Teaching Urban Planning through Experiential Learning in Large Classes'. Paper presented at the Australian and New Zealand Association of Planning Schools, Bendigo, September 22-24, 2012.

Wyndham City Council (2013a) *Strategy for Managing Growth in Wyndham* (Wyndham, Wyndham City Council).

(2013b) *Wyndham City Council Plan 2013-2017* (Wyndham, Wyndham City Council).

(2012) 'Wyndham City Submission to the Economic Development and Infrastructure Committee - Parliamentary Inquiry into Local Economic Development Initiatives in Victoria'. Downloaded March 15, 2013:
http://www.parliament.vic.gov.au/images/stories/committees/edic/local_economic_initiatives/subs/61_-_Wyndham_City_Council.pdf

(2010) *Community Health, Safety and Wellbeing Plan* (Wyndham, Wyndham City Council)