

Access and movement background paper

The purpose of this paper is to provide an overview of some of the key land use planning issues associated with access and movement in Yarra — our transport network and the way we use it — to stimulate and inform the Liveable Yarra People's Panel discussions.

The People's Panel will meet in August and September 2015 and be hosted by Yarra City Council to discuss, deliberate on and make recommendations about key planning matters facing Yarra. These recommendations will ultimately inform a rewrite of Yarra's planning scheme.

This paper is not intended to be a comprehensive discussion of all things transport. It captures key information, trends, issues, and challenges, and presents these as a starting point for discussion.

To have informed and in-depth discussions about addressing the challenges of urban planning and development, it is important to understand that these outcomes are influenced by many factors, and Council cannot control or influence all of them.

Some factors are external, for example, delivery of major new infrastructure, fuel prices, and advances in technology (e.g. private motor vehicles, public transport, information systems). But others are internal or local, like decisions about how much road space is allocated to different modes, and how we prioritise different vehicles and users at intersections. Internal or external, all of these affect the way we move about in Yarra. The People's Panel deliberative forums are an opportunity to consider a range of challenges, issues and opportunities, and to provide advice to Council on key planning issues.

This paper provides a brief overview of the historic development, management and role of the transport network in Yarra and the wider metropolitan area. Where relevant, reference is made to the socio-economic, environmental and political aspects that have influenced decision-making and helped to shape the layout and function of Yarra's transport network over the last 150 years. The paper concludes by setting out some of the key strategic transport challenges facing Yarra in the coming years.

Metropolitan Melbourne

Transport networks have a large influence on people's daily lives, enabling access to employment, education, services, shopping, recreation and having a large influence on quality of life and the liveability of a city.

Melbourne's infrastructure network has played a key role in the growth and evolution of its economy since the Gold Rush of the 1850s sparked the construction of Victoria's early railways. As Melbourne has expanded and progressed into one of the most liveable cities in the world, the transport network has had to continually respond and evolve.

In 2015, the importance of effective transport planning, and the timely delivery of local area and city shaping infrastructure projects are as relevant to the future of Melbourne as they have ever been. The transport network will play a key role in maintaining liveability, accommodating significant population growth and increasing productivity to secure Melbourne's long-term position as a global city.

Access and movement in Yarra

Yarra has been an integral part of Melbourne's transport network since the time of early settlement. It has a historical street layout that dates back to the early nineteenth century which

originally consisted of tracks used by pedestrians and horses. Ever since, our streets have been incrementally upgraded and managed to meet the changing transport demands of a growing modern city.

Yarra's historic fixed rail public transport network comprising of trains and trams remains much the same as it did in the 1920s. But the look and operation of the transport corridors has slowly and steadily evolved as the city has grown, technology has advanced and lifestyles have changed.

Evolution of access and movement in Yarra

1850–1920: Speculative public transport investment triggered by the Gold Rush

A compact inner city, relatively high population densities, and easy access to work, shopping, and other activities made walking the most common form of transport in Yarra. Walking has been supported as a key form of transport since the neighbourhoods that now form City of Yarra were established, with the early street network quickly upgraded to include kerbs and gutters, and the installation of street lighting.

The mixed residential, industrial and retail land use pattern that emerged during this time has shaped the urban landscape of Yarra and has allowed walking to remain an attractive form of transport for residents and visitors.

Cycling is also a long-established form of transport in Yarra. The first bike boom was in the late 1890s, which was driven by the evolution of more practical modern bicycle designs along with cycling becoming increasingly socially acceptable as a method of travel for women of all social classes.

Figure 1: Collins Street, Melbourne (1916)



Bicycles have been a feature of inner Melbourne streets for well over 100 years and the challenge of providing safe and attractive facilities for cyclists have existed since this time.

Source: State Library of Victoria

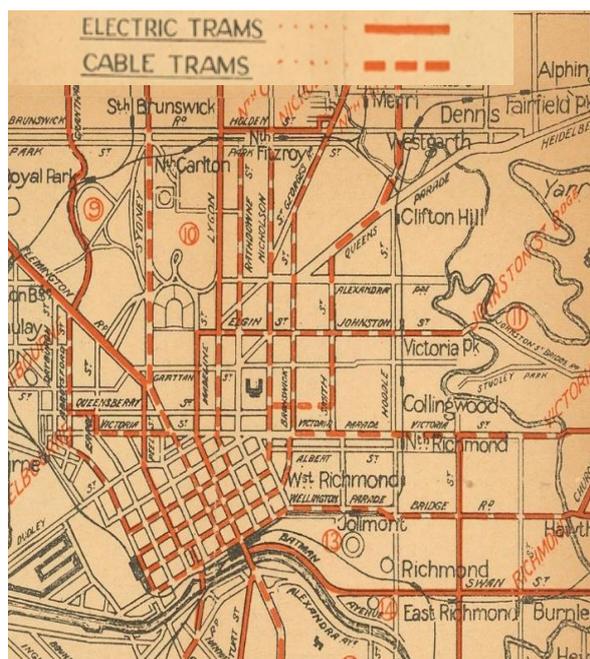
The majority of the suburban rail network in Yarra was installed between 1850 and 1920 and the Gold Rush was the initial catalyst for this. This coincided with a land boom where speculators invested in suburban land holdings and advocated for rail investment to increase their land value. During these years of rapid rail network development, new lines were regularly added as the network continually evolved and expanded.

In Yarra, trams have been a particularly prominent feature of the transport network for over 130 years. They have played a key role in shaping its high street commercial centre built form. The earliest trams were horse-drawn and Melbourne's first cable tram line opened in Richmond in 1885.

By 1900 an extensive network of 70 kilometres of two-way tram tracks had been installed. The original cable tram network was one of the most heavily patronised in the world and was a highly efficient way of moving large numbers of people around as commercial activity continued to intensify.

In 1919 the Melbourne and Metropolitan Tramways Board (M&MTB) was formed to consolidate the success of trams and to standardise electric, cable and horse-drawn tram operations across the network.

Figure 2: The tram network in Yarra in the 1920s



The inner Melbourne tram network has remained much the same since 1920 albeit with upgrades to trams, stops and track.

Source: State Library of Victoria

1920–1950: Public transport consolidation and changing travel patterns

After an extended period of investment in public transport in Melbourne, the first half of the twentieth century was marked by the two World Wars, a prolonged episode of economic depression, and the establishment of a war economy. All of these events diverted government funding away from large-scale investment in Australian cities. Even as Melbourne continued to emerge as a major metropolis, the Gold Rush-fuelled abundance of the late nineteenth century was superseded by a long period of austerity, severely curtailing further expansion of the public transport system.

Between 1920 and 1950 the early tram network was consolidated and continued to be well patronised as an alternative to rail for access to the CBD. The electrification of the network and the phased deployment of new trams continued.

Due to the emergence of car travel, public transport patronage began to fall from the late 1940s. This marked the start of a long period of debate regarding the future of trams in Melbourne given that many other cities were looking to implement bus-based solutions that were cheaper to deliver and considered fit-for-purpose given the thinking that most people would eventually travel by car.

The future of trams remained in jeopardy for the next 30 years due to falling patronage (263 million tips in 1950 to 133 million in 1970), public transport cost-cutting and an emphasis on road investment. Melbourne, through a combination of strong leadership within the Tramways board, the existence of a large, well-maintained tram fleet, and other factors, has retained its tram network. Since this time the retention of trams has been celebrated as a great success, however low priority has been given to further developing and managing the tram network over several decades so it has not yet reached its potential.

1950–1980: The automobile age

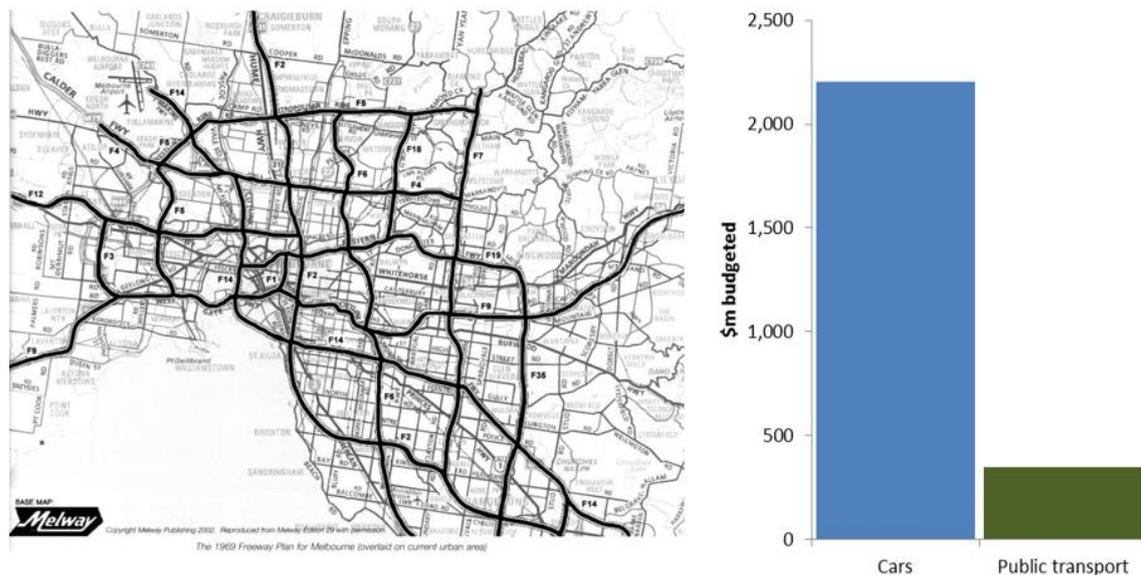
The austerity that had been dominant during World War II and the post-war period began to ease during the 1950s as living standards improved and modern consumerism emerged. Items once considered to be a luxury were now becoming more affordable and by 1963 around 35% of Australian households owned a car.

The continued transition of the car from an item only for a privileged few to a mass form of transport had a major impact on land use patterns and infrastructure network development and management in all modern cities. Urban spaces transitioned from being of a scale suited to pedestrians moving slowly to motor vehicles travelling at speed. Convenience for the motorist became increasingly important when designing new buildings and public spaces with drive-through takeaways and bottle shops, motels, large off-street parking areas, and residential drives and garages at new homes becoming increasingly common.

Local streets previously built for pedestrians, horse-drawn carriages and local access were now required to accommodate cars, which changed the role of the street as accessible public space.

Melbourne’s transport planners embraced the car and proposed a road building program of unparalleled scale. The shift in transport priority is demonstrated by the map below, showing a planned freeway network taken from the 1969 State Government Transport Plan. The graph (below right) shows the focus on road investment in the 1969 plan.

Figure 3: Proposed freeway network in 1969 Transport Plan, and associated proposed budget



Source: 1969 Melbourne Transportation Study, Wikipedia

Widespread car ownership and freeway building since the 1960s decoupled the long established relationships between urban settlement and the provision of public transport services. It resulted in the emergence of new, car-oriented suburbs, which expanded the geographical coverage of the metropolitan area. More cars also meant more demand for car parking on Yarra’s streets. Our first parking meter was installed in 1964 recognising that parking was a commodity of limited supply. There are currently 2,600 paid parking bays in Yarra. The numbers of cars on the road and residents in Yarra have continued to rise significantly while the space available to accommodate cars has not.

Widespread car ownership also meant people no longer had to live and work in the same area, a situation that brought with it a range of employment, social and housing considerations. The key changes to city form and social development at this time created a substantial increase in personal mobility and many people have since oriented their lives around the personal mobility that a car can provide. The dawn of the suburban shopping centre serviced by a large car park and accessed via the freeway network reflected this new mobility as such developments would not be viable without mass car access.

Yarra has long been a thoroughfare from the outer suburbs to the CBD. For many years, travel demand was accommodated on the rail system. Since the 1960s, Yarra also became a thoroughfare for suburban road traffic accessing the CBD. This traffic uses a number of routes in Yarra including arterial roads and freeways managed by the State Government and historic local roads managed by Council. As the city grew to the north and east, so did the demand for car travel through Yarra.

By 1970, the metropolitan rail network had become very rundown, with the last major investment in suburban track (the Glen Waverly Line) occurring nearly 50 years beforehand and some train carriages dating back to 1910. Plans to build the Doncaster Rail Link, which was first proposed in 1890, were once again abandoned. The outlook for rail was relatively bleak given the Victorian Government's intention to build more inner city freeways while looking for opportunities to strip back and privatise rail services to reduce costs.

By the early 1970s, congestion had emerged as a major issue as car ownership and kilometres driven in Melbourne continued to rise. Some transport planners, academics and the members of the community began questioning the wisdom of pursuing a freeway-based approach to meet Melbourne's long-term transport needs. A number of proposed freeway projects were cancelled or scaled back at this time partly as a result of public protest, including the Eastern Freeway which terminated at Hoddle Street but was originally designed to provide a link from the eastern suburbs through to Flemington. Notwithstanding, a large number of freeways have been delivered since the early 1970s including CityLink, Monash Freeway, and Tullamarine Freeway. Other potential freeway and bypass projects, such as the Outer Metropolitan Ring Road, and most recently the Western Distributor, continue to be discussed.

The high priority given to planning for huge increases in car trips meant that walking and cycling were often secondary considerations. Roads were built primarily for cars, and included measures to keep the traffic moving, such as roundabouts, traffic signals, and allocating vehicles as much road space as possible.

Yarra at this time also had a large number of industrial buildings and structures in various stages of decline, and compared with the Yarra of today, the public and private domain was rather run down. It was not generally viewed as a desirable place to live with a large number of upwardly mobile residents having relocated to the less industrialised middle suburbs where properties were larger and there was generally more space.

1980–2015: Central city revival, and renaissance of non-car forms of transport

By 1980, two decades of decentralisation, a car-dominated transport policy, and a lack of focus on urban design or conceptualisation of streets as places, central and inner Melbourne was left with less character and vibrancy. A number of steps were taken to address the decline of Melbourne's CBD, including the launch of the Postcode 3000 program, which deployed a holistic package of measures to make central Melbourne streets more interesting, people-friendly places.

The completion of the CBD rail loop in 1985 opened up other parts of the city for rail access and played a major role in shaping the CBD as it is today.

The early 1980s saw the first passenger increase in rail-based public transport since the 1950s. The construction of the rail loop, CBD population and jobs growth, and residential migration back to the inner city played a part in this.

Other factors making car travel less attractive, such as fuel price rises, traffic congestion, taxation on company cars, and parking cost and availability, have also played a role in the increased demand for public transport, walking and cycling.

Since 2000, Melbourne has experienced huge growth in metropolitan rail and tram passenger numbers. This growth has been driven by factors, such as the continued strengthening of the CBD and population increases, which have resulted in demand for strong linkages with the inner city employment market. The relatively low cost of using public transport in Melbourne combined with falling levels of car ownership in some sections of the community such as young inner city dwellers, has added to this trend.

However, the tram and rail networks have not evolved beyond a series of discrete, CBD-oriented lines that lack major interchange points to allow people to travel across the inner north, including Yarra, without first having to travel into the congested inner city.

While it has not been expanded, Melbourne and Yarra's tram network has been upgraded, with a more modern fleet of trams with greater passenger capacity, increased tram priority on streets, and most recently, accessible stops. Some restructuring of tram routes has also occurred which, in Yarra, has increased service levels along Victoria Street. These measures are aimed at improving the quality of public transport for a large and growing number of users.

With very few tram routes added to Melbourne's and Yarra's network over the last 100 years, buses have been used to expand the public transport network and plug the gaps in train and tram infrastructure. Heavily utilised bus routes into Yarra include the Doncaster Area Rapid Transport (DART) buses that operate along Hoddle Street and Victoria Parade, which are used by over 20,000 people per day. Bus services along Hoddle Street and Punt Road are also well patronised and provide a useful link between Elwood and Clifton Hill. Both of these bus routes fill strategic gaps in the rail network and are used heavily for commuting purposes. Some of these commuters will have access to a car but choose to catch a bus as it is quicker and easier than driving due to congestion and parking difficulties. On this basis, buses in Yarra play an important role in reducing car trips and are quite different from buses in other areas of Melbourne, as they tend to perform a strategic function along major traffic routes rather than traversing local neighbourhoods.

Bus use increased by 33% across Melbourne between 2004 and 2010. Although bus use by Yarra residents is comparatively low, due in part to the existence of a comprehensive train and tram network, it is still higher than the Melbourne average.

Figure 4: Hoddle Street bus and car traffic



Source: Flickr

Yarra has the highest levels of cycling in Melbourne and bicycle use has increased significantly over the last ten years. This increase has been driven by a range of factors, including: increased traffic congestion, close proximity to the CBD and its skilled jobs, relatively flat terrain, bicycle network upgrades, difficulties and costs associated with car parking, crowded trains and trams, the lack of a public transport ‘network effect’¹ in Melbourne, rising petrol prices, a desire to reduce personal greenhouse emissions, a wish to divert disposable income away from car ownership, cycling being in fashion, and personal health and fitness.

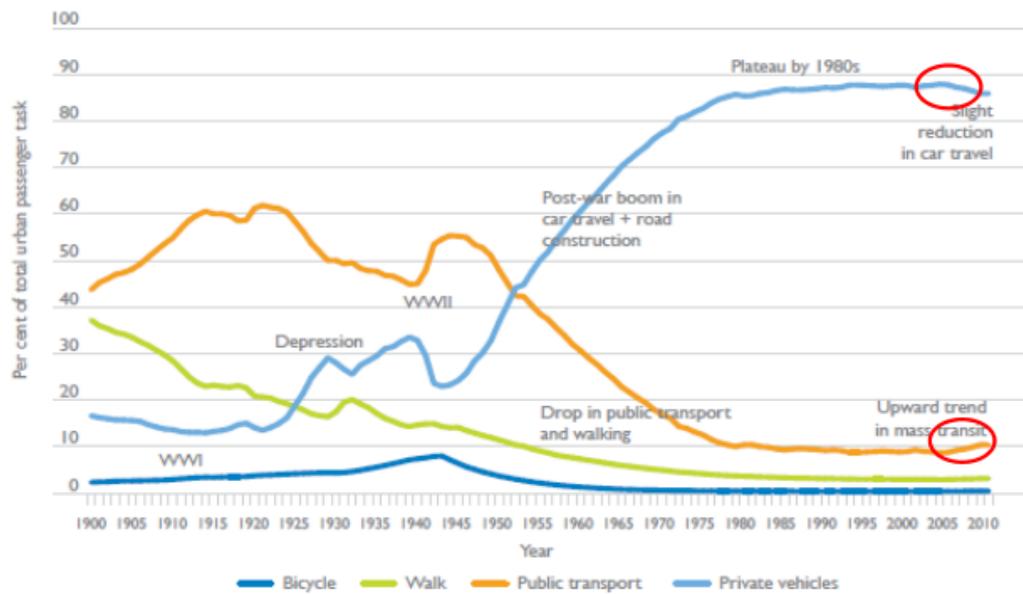
Recent trends and influences on access and movement in Yarra

Over the next 15 years, the transport trends and challenges that have emerged since the early 1980s are expected to continue. These trends include: population and economic growth continued expansion and intensification of the CBD, growth in active travel, transport policies that encourage the use of non-car modes, intensified use of the transport network. These trends will drive increases in the number of people travelling to and through Yarra.

The travel trends over the past 100 years in Australia are summarised in Figure 5 below, which shows metropolitan travel on each mode as a percentage of the total distance travelled on all modes.

¹ The extent to which the public transport services function as an interconnected ‘network’ rather than a series of individual lines or routes

Figure 5: Percentage of total Australian transport trips by mode 1900–2010

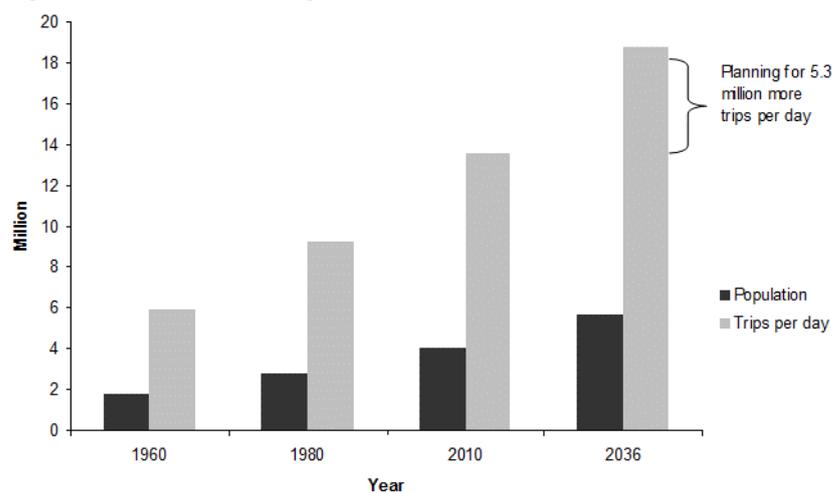


Source: Adapted from Cosgrove, D. Australasian Transport Research Forum 2011 Proceedings (Adelaide) Long-term patterns of Australian public transport use

Yarra in the modern context

Yarra is impacted by city-wide trends because of its location between the CBD and growing suburbs. Economic and population growth increase travel demand exponentially. Based on current trends, it is expected that by 2036, there will be an additional 5.3 million trips per day across all forms of transport in Melbourne, as shown in the figure below. The population of Yarra will increase by approximately 20% over this time so there will be more trips to, from, through and within Yarra.

Figure 6: Travel demand growth forecast

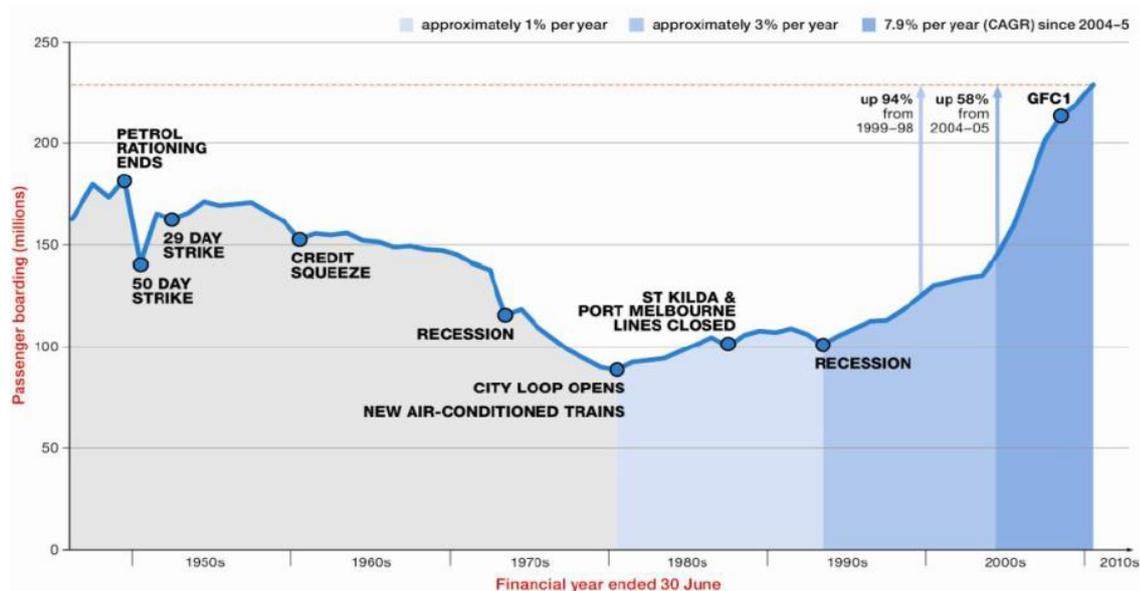


Source: VIF2011, ABS 2009

Public transport challenges

Rail plays a relatively limited role in meeting transport needs for trips taken *within* Yarra. Although there are several rail stations and interchanges within the municipality providing access into the CBD, the rail network in Yarra is used mostly to accommodate public transport trips that begin or end in neighbouring and outer suburbs and are not used for trips within Yarra.

Figure 7: Rail patronage in Melbourne



Source: Melbourne Public Transport Patronage Long Run Series 1945-46 to 2010-11, Public Transport Victoria (2011)

By the time rail services reach Yarra from middle-ring suburbs during the morning peak travel periods, they are often at or nearing capacity, making other forms of travel more attractive for peak hour trips originating in Yarra. There is plenty of capacity heading away from the city but demand for travel in this direction is low as Melbourne is a very CBD-oriented city — particularly when it comes to the professional services jobs that employ a large number of inner city residents.

Rail has accommodated a rapid rise in public transport travel demand since 2000, as shown in Figure 7, and this trend is set to continue.

Trams have played an integral role in the Yarra transport network and Melbourne is very fortunate to have kept its tram network. However, creating a street environment conducive to getting the most out of this network is very challenging because of the many competing demands on street space.

Average tram speeds in Melbourne are among the lowest in the world. This, combined with a historic lack of investment in high-capacity trams, new routes, and other measures that will get the most out of tram operations, has resulted in overcrowding and slow moving trams on the Yarra network. Tram patronage is expected to continue to rise as population and travel demand increases, and this will challenge the capacity of the network.

Buses are relatively cheap to introduce and operate, and like trams and heavy rail, will continue to play a role in meeting rising travel demand. Given the flexibility of buses as a transport mode, the existing funding constraints, and time taken to complete major transport projects, buses are likely to continue to be favoured by the State Government for new local public transport, at least as an

interim solution. Buses, however, are not seen as attractive to the community (when compared to the tram network) and this has curtailed the development of a bus-oriented culture seen in inner Sydney and inner Brisbane.

The costs of running public transport services and delivering new infrastructure are putting significant pressure on limited state government budgets across Australia, and Melbourne has some of the highest public transport fare subsidies in the world. However there are perceptions in the community that public transport fares do not offer value for money. These perceptions have been reinforced by recent changes to fares to and from Zone 2 that allow outer suburban communities to travel far longer distances on public transport at the same price as Yarra communities.

In response to forecast demand over the next 30 years, there are many proposals to increase the capacity of rail such as line duplication, signal optimisation, city loop upgrades and the introduction of new high-capacity carriages. These proposals require consistent and significant investment and have continually struggled to obtain the necessary funding from the State and Federal Governments. Funding has been secured to progress but not deliver the Melbourne Metro Rail project, a city-shaping rail project that will increase the capacity of the entire suburban network and support the growth of the CBD over the next 30 years. A number of grade-separated rail crossings have also been funded to address a number of pinch points on the infrastructure network.

Use of the road network

Yarra's streets were in place approximately 100 years before the arrival of cars, so were not designed to accommodate large volumes of vehicle traffic and car-oriented lifestyles. This has created an environment where cars have been retroactively accommodated so that they share space with other modes of transport. Yarra's Local Area Traffic Management (LATM) program rolls out measures to provide facilities that meet the needs of motorists, pedestrians, cyclists and public transport users who are undertaking a diverse range of activities on Council-managed streets. These activities include work, school, childcare, shopping, recreational, and other trip types.

There is a continual need to evaluate the role of cars as a transport choice in Yarra and how limited street space can be most effectively used. VicRoads data shows that traffic volumes are generally rising significantly on the inner freeways and falling slightly on inner city roads as they become more congested, and measures are implemented to increase opportunities to travel by other modes like public transport, walking and cycling. These trends suggest that cars will continue to lose mode share for long periods of the day as traffic volumes remain static but the number of trips made each day continues to rise.

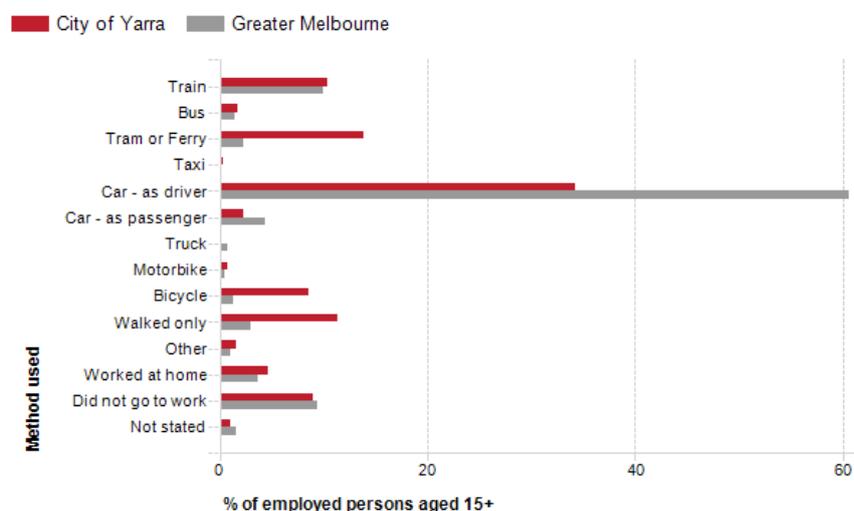
In this context, it is important to note that mobility and liveability can only be maintained if more people use space-efficient, non-car modes of transport. This means public transport, walking and cycling will be increasingly important as travel demand grows on a constrained transport network. At the current time the majority of street space in Yarra and elsewhere in Melbourne is given over to moving and parking cars. This is despite transport policies at all levels of government consistently stating for over two decades that public transport, walking and cycling are priority modes, particularly in inner Melbourne where the potential for these modes to meet transport needs is very high.

As demonstrated on the figure below, which is based on 2011 ABS data, residents of Yarra embrace travel by non-car modes and are far more likely to walk, cycle or catch public transport to work than the Melbourne average. However, 40% of Yarra residents still use a car for travel to

and from work. The proportion of car commuters will continue to shrink as net travel volumes rise over the next 30 years. In this context it is important from an ongoing liveability and economic perspective that the quality of facilities provided for people travelling by non-car modes are not overly compromised to accommodate a shrinking number of people that continue to travel by car.

It is recognised that the car will continue to play an important role in Yarra’s transport story, however the role is likely to continue to change. It is interesting to note that London, UK, and Bern, Switzerland, have taken progressive approaches and provide car access and parking for those who value it, while providing attractive non-car options and more pleasant public spaces for people to enjoy. Successful transport systems present the community, businesses and visitors with attractive travel choices.

Figure 8: Method of travel to work 2011



Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 (Enumerated data). Compiled and presented in profile.id by .id consultants.

Managing demands for off-street parking

There are approximately 60,000 on-street parking spaces in Yarra which are used by residents, businesses and visitors. Residents of new developments are not entitled to a parking permit. This, and concerns that new development will worsen parking conditions for existing residents, can push for generous off-street parking to be provided.

If off-street car parking is provided at new developments at the levels it has recently, then there will be some 18,000 additional off-street parking spaces at new developments in Yarra by 2031. By way of context, this is twice the parking capacity of Chadstone Shopping Centre. For each development site consideration needs to be given to the longer-term, cumulative impact of parking on traffic and building design to address parking problems.

Reinforcing a culture of active transport

Bicycles are highly space-efficient and have minimal environmental and amenity impacts like noise, emissions, dust and vibration. Cycling is also increasingly featuring in the active travel drive that is now occurring to counter rising levels of obesity and its long-term consequences for society.

Cycling is long-established and well-embedded in the culture of the Yarra community. Yarra City Council is a leader in bike planning and Yarra has the highest levels of cycling in Australia. A key challenge over the coming years will be to build on this cycling culture to increase cycling levels further. Central to this will be to expand the typical cyclist demographic from males in their 20s and 30s by encouraging more women, children and older people to cycle regularly.

Increasing the broad appeal of cycling will require new cycle infrastructure that significantly improves safety. For many cyclists, a cycle route is only as good as its weakest link, so spot check improvements are required across Yarra to bring the whole network up to a better standard.

Currently 7% of trips are made by bicycle in Yarra and cycling levels have risen consistently over the last ten years. Achieving further increase in cycling will be far more difficult. Given Yarra's transport challenges a reasonable aspiration would be for more than one in five trips to be made by bicycle during peak travel times.

To date, much of the cycle infrastructure in Yarra and elsewhere in Melbourne has been delivered where it is quickest and easiest — those that are low cost and that improve conditions for cyclists without major impacts on other transport modes. Examples of recent changes include painting cycle lanes along roads with wide car lanes, or installing small bicycle head-start boxes at traffic lights. Most of these projects have now been completed so more challenging projects are next. Council has started on this journey and has recently constructed its first Copenhagen style bike lanes on Wellington Street, Collingwood. These high-quality bike lanes physically separate bicycle and car traffic and also separate cyclists from parked cars so they are protected from collisions with opening doors.

Walking has long been a popular mode of transport in Yarra, although the quality of the pedestrian network is variable and needs to be improved. Improvements are needed particularly in and around activity centres, around schools, and in and around other key hubs.

Challenges for access and movement in Yarra

Emerging transport trends are closely linked to the continued growth and development of Yarra and Melbourne. Yarra's transport network is increasingly operating at full capacity, particularly during the peak times. People are increasingly travelling outside peak travel times to reduce exposure to traffic congestion and crowded public transport. This has resulted in peak spreading — 'rush hour' now extends to several hours and includes the weekends where two-way traffic volumes on some arterials, for example Hoddle Street, are higher than on weekdays. Peak spreading is a common trend in major cities but it can only mitigate transport issues to a limited degree, and only in the short term.

Providing alternatives to sitting in traffic

Yarra's street network is dominated by car parking and traffic, reducing the amount of space available for other forms of transport and features that make streets appealing places.

Accommodating the movement and storage of large numbers of cars is very challenging, as the amount of physical space available is finite and the demand for its use is continually rising. The car will continue to be an important transport mode, but if Yarra is to maintain its position as a desirable place to live and do business, then Council, with support from the State Government, will have to provide people with attractive alternatives to driving.

The road network in Yarra will continue to be congested. Feasible options for building new roads to increase capacity are very limited and there is now a large body of work showing that building

roads does not reduce traffic. Congestion on the road network and a high demand for travel is an indicator of economic activity. For example, Detroit in the USA has very little traffic congestion but it does not have a viable economy either. High and continually worsening levels of traffic congestion is also a basic driver for meaningful change in how Yarra's transport system is developed and managed.

Reassessing how street space should be used

Yarra City Council has consistently promoted walking, cycling and public transport in its policy documents. In addition to benefits for the transport networks, getting more people to use these modes in Yarra is also aligned with strategic objectives for amenity, liveability, productivity, sustainability and health.

If these modes are to be attractive alternatives to car travel, they will require more space in Yarra's streets, so that they are safer, easier to use, more reliable, more comfortable and can offer faster travel times. Consideration needs to be given to things like whether it is appropriate for a public transport service carrying thousands of passengers to be delayed by a relatively few cars with an average occupancy of just more than one person per car; and whether clearways should be installed to enable all modes of transport to better move along key corridors.

It will be important to assess how street space is used and managed so that day-to-day decision making works towards a successful transport system for Yarra.

Streets in Yarra have multiple roles and are therefore very complex environments. In recent years Council has had to make a number of difficult transport planning decisions and it will be required to make many more in the future. To enable the best choices to be made for the community, Yarra will need a framework that establishes clear priorities for delivering a successful transport network that will be effective for many years to come. An approach like this would counteract the temptation to cater for contradictory transport needs and the creation of a transport network that do not work satisfactorily for anyone.

The following paragraphs use Smith Street as example of a corridor all users experience difficulties regardless of the form of transport they use. Many of these observations can be applied in some form to a large number of streets in Yarra.

Smith Street is a local road with Hoddle Street just to the east being the designated arterial route for vehicles making longer through trips. However, the design of Smith Street does not prevent vehicles from making through trips and many do so. It is heavily congested, forcing both trams and cars to travel at very low speeds quite often. This congestion also makes it difficult for people who need to park in this area to access parking.

The attractiveness of travelling down Smith Street by tram is limited as these trams are among the slowest in Melbourne due to traffic congestion. Cycling along Smith Street is also unattractive as the cycle lanes are narrow and run alongside parked cars, presenting a real risk of injury from a car door suddenly opening in front of a travelling cyclist. This, known as "dooring", is the most common form of incident for cyclists in inner Melbourne and results in a significant number of injuries.

Smith Street is not a particularly attractive place for pedestrians as footpaths are relatively narrow with most of the space along the corridor dedicated to traffic and car parking. Pedestrians are also exposed to the noise, dust and fumes of traffic, and crossing the street can be difficult due to the continuous procession of cars. Although there is some alfresco dining premises, wider opportunities to make Smith Street a genuinely attractive place to sit and enjoy are currently limited.

Identifying transport solutions for a diverse community

As transport is something that people use every day, it is a high-profile and emotive topic. There are always many opinions on potential solutions, each of which is shaped by diverse individual and collective interests. The community of Yarra is generally well-informed when it comes to a discussion on transport. The community is also diverse in its socio-economic and demographic make-up, resulting in a range of expectations and culture around transport.

For example, young people in inner Melbourne apartments are increasingly turning away from car ownership and actively looking for non-car transport options. At the other end of the spectrum, there are residents who use cars frequently and may view public transport as something that is not for them but takes other people's cars off the road.

There are differing views on transport and what a successful transport system looks like, depending on a person's circumstances, experiences, priorities and understanding of the issues. It is important to elevate the discussion on transport away from individual interest to focus on viable long-term solutions for the greater good and the community as a whole.

Another key challenge will be to make the transport system more inclusive so it can be used for a broad section of the community. Council is currently working with the State Government to deliver infrastructure that is Disability Discrimination Act (DDA) compliant. This includes providing level accessible tram stops. These stops will enable not only to people with ongoing mobility issues, but also for people with injuries, pregnant women, people with prams or carrying children, people carrying bags of shopping or luggage, and the elderly, to access to the public transport system.

Installing DDA-compliant infrastructure is a once-in-a-generation investment that can provide opportunities to deliver wider improvements to the transport system and the quality of public spaces. It is important that these opportunities are not allowed to pass by. For example, level access tram stops that are built out on to the street, as have been constructed on High Street, Northcote, present transformative opportunities for traffic calming and additional space to be used for pedestrians and place making. These designs have impacts on traffic and parking so will not be universally popular. This is a good example of competing community demands that will be challenging for Council to navigate and communicate to the community. A planning scheme has a role in supporting strategic transport planning objectives and managing network impacts, and having a planning scheme that clearly defines what a successful transport system in Yarra is will assist in making discussions on such proposals to be productive.

Considering transport objectives in property development planning will play a key role in Yarra's movement and access over the next 30 years. It will be important for future development to consistently support transport objectives so that new development does not undermine those aspects of Yarra that make it attractive for further development.

Understanding the economic and liveability benefits of a successful transport system

Traditionally, approaches to encouraging the use of non-car forms of transport have been dominated by environmental sustainability benefits, hence the term sustainable transport. New technology means that cars can increasingly run on renewable energy at a viable price point for widespread use. Streets dominated by cars running on renewable energy will still be congested urban environments that delay public transport and present safety issues for vulnerable users like pedestrians and cyclists.

The focus, therefore, needs to shift to the economic and liveability benefits of having more people travelling efficiently by non-car modes so that Yarra's transport network can operate more

effectively. This approach will reduce the exposure of business and the community to the direct and indirect costs of congestion. Better managing how street space is used will also create new opportunities to make streets more pleasant places to spend leisure time, run errands and do business.

There is always the day-to-day temptation to focus on the difficulties of challenging some of the existing status quos, even when there is consensus that existing arrangements are not working. This can result in inertia, and/or an emphasis on the delivery of easy, but limited, projects. Ultimately, consideration needs to be given to the long-term costs of failing to tackle strategic transport issues.

Yarra needs integrated, long-term responses to its transport needs so that the municipality is maintained and enhanced as a place to live, work and visit. Council will then be able to work towards the adoption of the necessary planning guidelines, projects and infrastructure management regimes under its control to deliver it. Council will also need to strongly advocate the core role that the State Government plays in delivering a successful transport network, as it is responsible for the arterial road network and the rail, tram and bus systems.

Summary: where to from here and Liveable Yarra

Yarra has experienced significant change to become the place it is today. Yarra has adapted to influences and it has evolved, and it will continue to do so.

This paper raises a number of issues and questions for the People's Panel to consider. Limited space in streets and roads, competing demands between transport modes, changing travel preferences and cost of infrastructure are all significant considerations in planning for access and movement in Yarra.

As is evident in this paper, urban planning cannot control all factors influencing development. For the People's Panel to be successful it will be important to focus discussions on the factors that Council's urban planning can influence. Ultimately the greatest impact will be achieved by addressing issues within Council's influence and control and strongly advocating to State and Federal governments for public transport and active transport funding and action.



Yarra City Council PO Box 168, Richmond VIC 3121

T 03 9205 5555 **F** 03 8417 6666

TTY 133 677 then ask for 03 9205 5555 **Interpreter Services** 03 9280 1940

E info@yarracity.vic.gov.au **W** www.yarracity.vic.gov.au