

SUBMISSION TO

SENATE RURAL & REGIONAL

AFFAIRS & TRANSPORT

INQUIRY INTO

AUSTRALIA'S FUTURE OIL

SUPPLY & ALTERNATIVE

TRANSPORT FUELS



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1. INTRODUCTION

Fuels are fundamental to many transport activities and as a result many elements of society and today's lifestyles.

Transport is a means to an end and is a generated activity rather than an activity for its own sake (except walking and cycling for pleasure/health). Therefore there is a strong link to land use planning, social needs, economic influences and human emotions and reactions. Freight movement is influenced by financial and economic considerations whilst people are influenced by financial, social and emotional considerations.

The purpose of this submission is to:

- Highlight the critical regional congestion issues affecting the current community and the need for planning to address the issues for the future, and
- Provide general views and comments on issues relating to congestion, its impact on fuel and the Wyndham community.

Council is not in a position to provide commentary on projections of oil production or potential new sources of oil, or alternative transport fuels, but rather sees these as aspects of the Inquiry's Terms of Reference better addressed by organisations with appropriate expertise. However Wyndham Council can highlight how the issue of congestion has manifest itself, the economic and social implications of price impacts on transport patterns and the aspects affecting the Wyndham community.

2. THE CRITICAL REGIONAL LINKS

The most critical regional link is towards the Melbourne Central Activity District. Other than Wyndham itself, the principal destination of resident workers is the City of Melbourne (18.3%).

Table 1 indicates the destinations of resident workers in Wyndham in 2001.

Table 1: Journey to Work Pattern of Wyndham Resident Workers – 2001 ABS Census

<i>Corridor</i>	<i>Municipality</i>	<i>Number</i>	<i>Proportion (2001)</i>
Internal	Wyndham	13065	36.9%
South-west	Geelong	549	1.6%
North-west	Melton	259	0.7%
North	Brimbank	2068	5.8%
North-east	Moonee Valley	635	1.8%
	Moreland	320	0.9%
	Hume	825	2.3%
East	Maribyrnong	2340	6.6%
	Hobsons Bay	4221	11.9%
	Melbourne	6498	18.3%
Extended Inner	Port Phillip	1671	4.7%
	Yarra	607	1.7%
	Stonnington	321	0.9%

The corridor formed by Hobsons Bay, Maribyrnong and Melbourne as well as the inner suburbs of Port Phillip and Yarra form almost 45% of the resident worker destinations.

This travel demand highlights and reinforces the two significant regional transport network constraints and the need for:

- additional capacity for trains through North Melbourne Station, and
- planning for the additional travel demand across the Maribyrnong River / Yarra River

A principal influencing factor is the population growth of Wyndham and the region.

3. DATA ON REGIONAL ISSUES

3.1 Melbourne's Household Growth

Melbourne 2030 calls for a major shift in the focus of Melbourne's growth, from East and South to the North and West. It is already occurring as shown in Figure 1.

The historically significant south and east has reduced its share of growth substantially over the last 20 years, whilst the west and north has increased since the 1960s to now be at a similar level as the south and east.

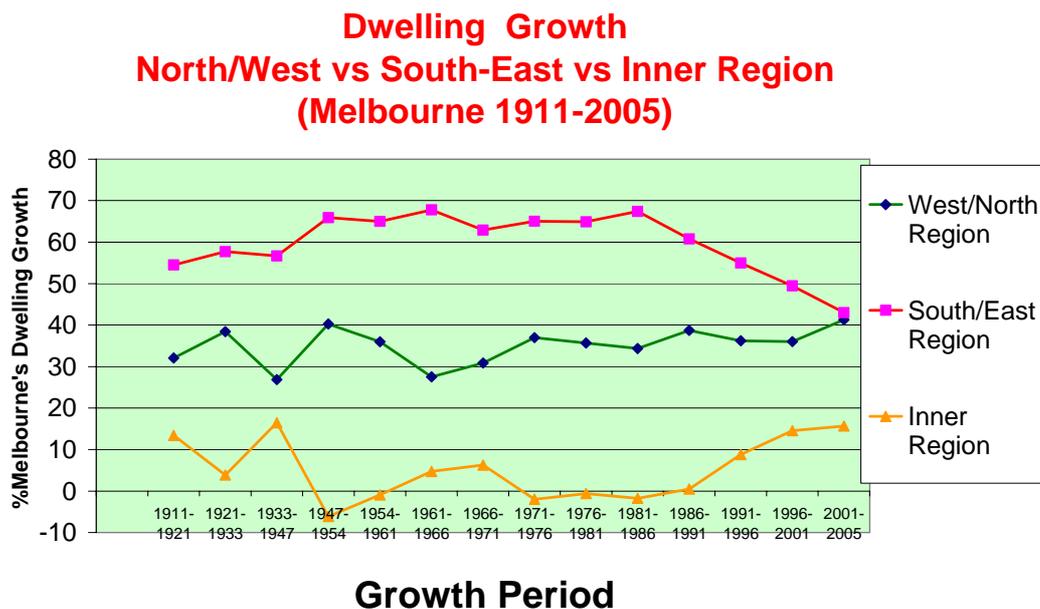


Figure 1: Household Growth by Region

As specific growth municipalities, Melton and Wyndham are now providing the main growth locations in Melbourne. This is reflected in Figure 2 and Table 2.

Total Dwelling Approvals - Melton/Wyndham vs Casey/Cardinia vs Hume/Whittlesea

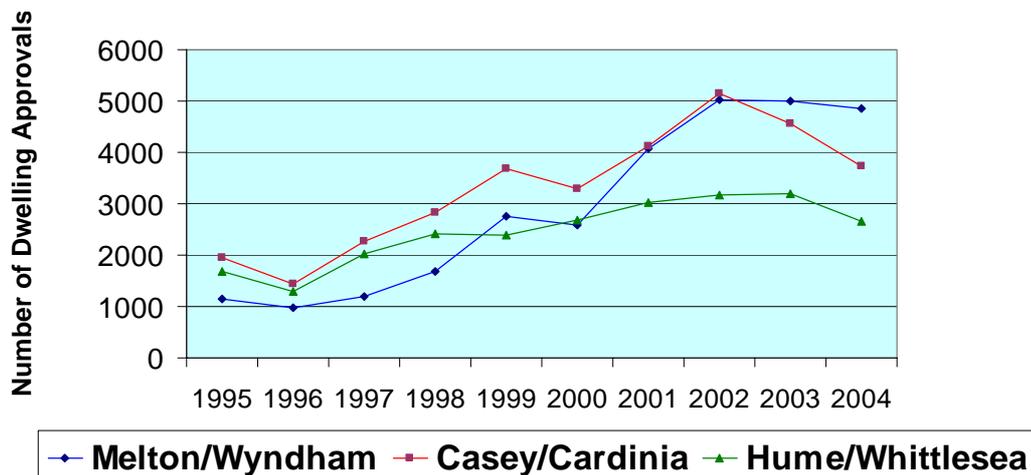


Figure 2: Dwelling Approvals by Location

Table 2 indicates the ten fastest growing municipalities in Australia (2003/2004). Perth and Capel in Western Australia are listed one and two but in terms of absolute population increase they are low and are one and two due to their existing low population base having populations less than 10,000.

Melton and Wyndham have significantly higher actual population increases and had higher population bases of 60,000 and 100,000 respectively.

Table 2: Ten Fastest Growing LGAs in Australia (growth rate 2003-04)

LGA	State	Growth 2003-04 (p)	Growth rate 2003-04 (p)
Perth (C)	WA	1,132	12.1%
Capel (S)	WA	926	11.6%
Melton (S)	Vic	5,923	9.1%
Wyndham (C)	Vic	8,378	8.4%
Mandurah (C)	WA	4,296	7.9%
Wanneroo (C)	WA	6,727	7.2%
Cardinia (S)	Vic	3,315	6.5%
Melbourne (C)	Vic	3,710	6.4%
Chittering (S)	WA	198	6.3%
Miriam Vale (S)	Qld	291	6.0%

Source ABS Cat No. 3218.0 – Regional Population Growth Australia and New Zealand, 2003-04

Figure 3 shows the disparity in population forecasts by the Department of Sustainability (DSE) in their publications Victoria in Future 2000 and Victoria in Future 2004 and (i) the actual growth observed and reported by ABS and (ii) the forecasts by Wyndham Council.

Wyndham Forecast Population Increase

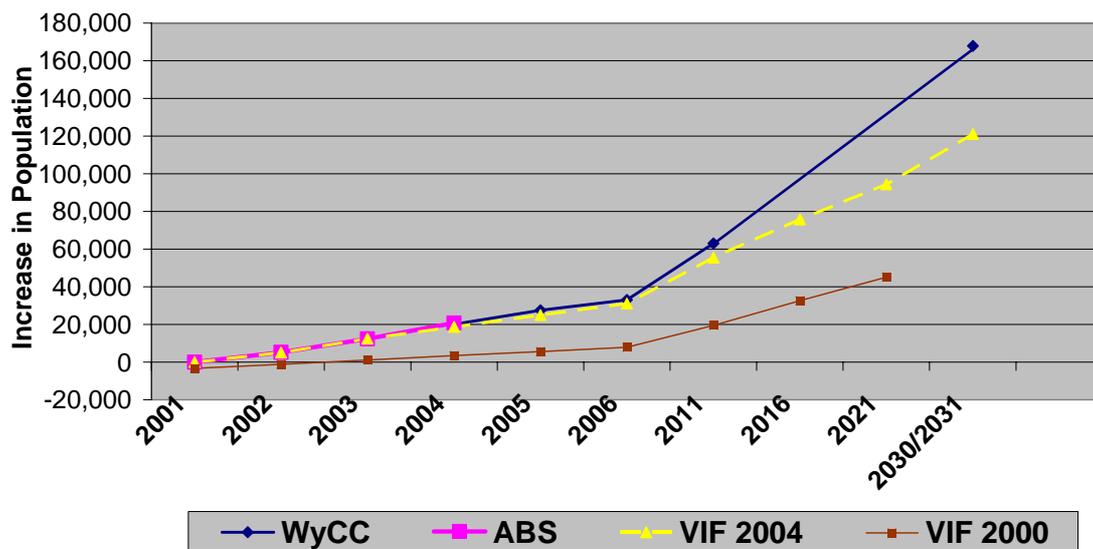


Figure 3: Population Forecasts fro Wyndham

Wyndham's growth has tripled the Victoria in Future 2000 (VIF2000) population forecasts since 2001. The subsequent Victoria in Future 2004 figures are sound in the short term but may also under-estimate the longer term situation.

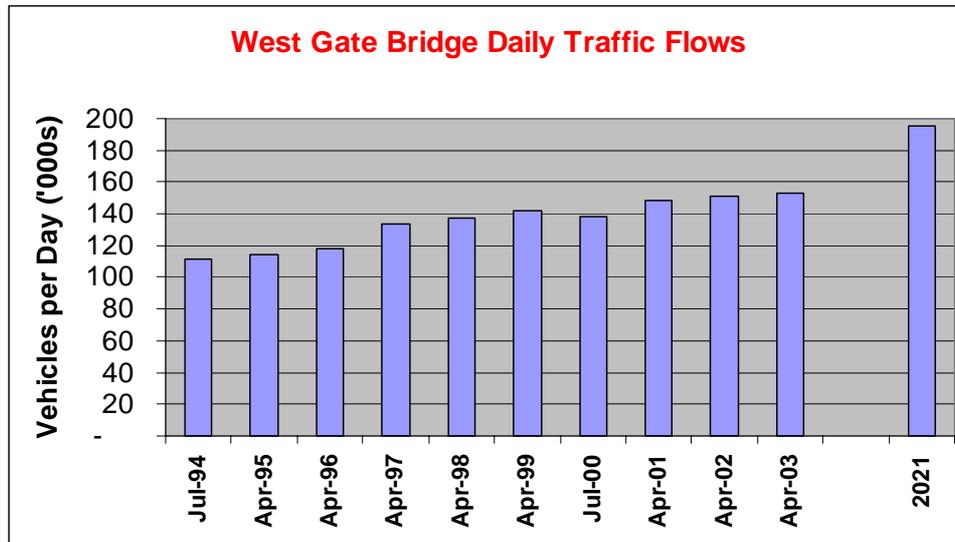
The VIF2000 figures were used in the Inner West Integrated Transport Strategy (IWITS) and Council is unsure which population forecasts are being used in the West Gate Bridge Study by VicRoads which was initiated in 2003.

The overall implications are:

- the predicted traffic flows on the road network will occur sooner than estimated or predicted.
- The estimates of train patronage and additional services required will occur sooner than estimated
- The need to plan for and develop a strategy to address these two issues has to commence earlier than currently thought.

3.2 Traffic Growth/Projections

Figure 4 indicates the historic daily growth of traffic flow on the West Gate Bridge over the last 10 years. The projected volume for 2021 is based on the forecast from the Inner West Integrated Transport Strategy (IWITS).



- **Commercial vehicles are 12% - 13% of the traffic flow**

Figure 4: West Gate Bridge Traffic Flows

Demand projections for the West Gate Bridge (based on outdated population projections used in the IWSTS) suggest that daily volumes will reach close to 200,000 vehicles by 2021.

In practice the carrying capacity of the Bridge during peak periods is already fully utilised, and the alternate routes of Footscray Road, Dynon Road and Racecourse Road are also near saturation and have very limited potential to accommodate significant volume increases. Yet the draft IWITS currently indicates potential traffic volumes of:

- Smithfield Road – 67,000 vpd
- Footscray Road – 58,000 vpd
- Dynon Road – 54,000 vpd

These traffic volumes are well in excess of the capacity of four lane divided roads (40,000 – 45,000 vpd) unless the distribution of demand throughout the day changes significantly. Therefore the probability is that lengthy delays will occur to all traffic – commuters, freight, and business trips.

A major concern is that the IWITS used Victoria in Future 2000 forecasts of population growth and distribution. These are significantly less than current estimates by DSE and the forecasts of the Western Region Councils.

The consequences are:

- (i) the estimated traffic flows will occur earlier than forecast,
- (ii) the overall travel demand task will be significantly greater than estimated and require more significant actions than currently considered

3.3 Port of Melbourne Activity

Forward projections from the Port of Melbourne show that container trade will treble in the next 20 years. A 50% increase in dry bulk tonnage is envisaged while slightly lower levels of growth are expected in relation to motor vehicles and other bulk freight activity.

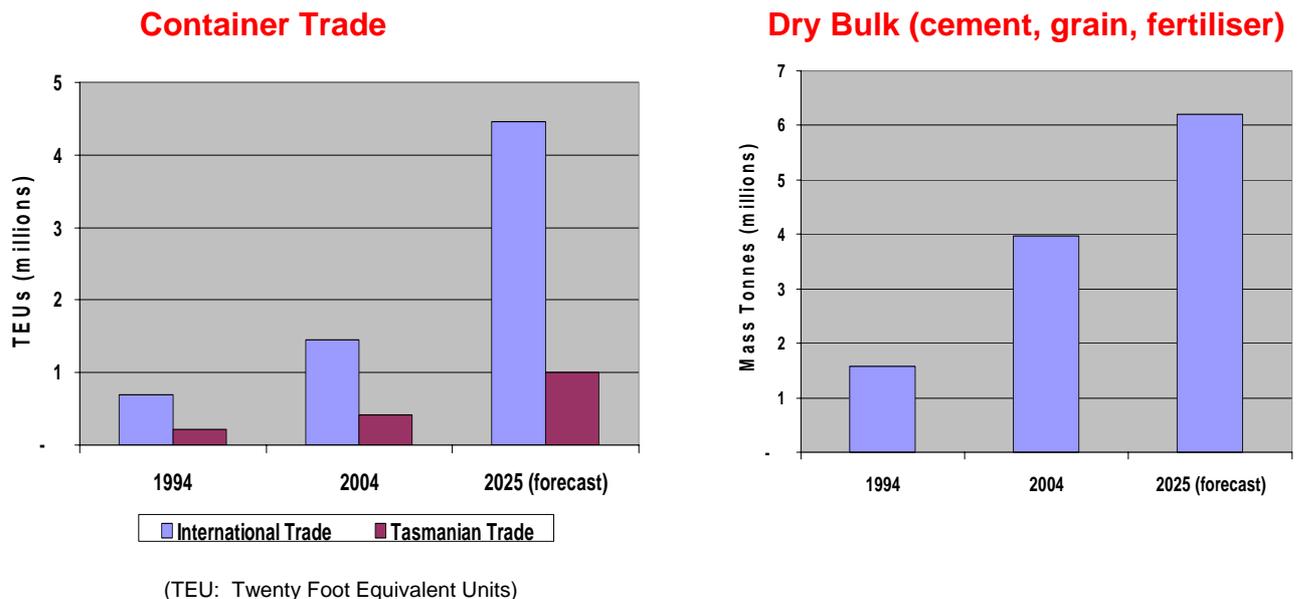


Figure 5: Port of Melbourne Activity Growth

Freight demand and movement across the Maribyrnong River will grow in the future and needs to be managed efficiently and economically. Even with the State Government's objective of 30% of freight to the port being moved by rail, the remaining task of moving 70% of goods is projected to be substantially more than today and needs to be addressed.

3.4 Melbourne CBD

Melbourne 2030 indicates that Central Melbourne will remain a key location for high-order commercial development and the retail and entertainment core of the metropolitan area. Policy 4.2 is to "strengthen Central Melbourne's capital city functions and its role as the primary business, retail, sport and entertainment hub for the metropolitan area." Melbourne 2030 further states that Central Melbourne is a major hub of transport and communications networks and the State's gateway to the global economy. Victoria's prosperity will continue to be strongly linked to that of Central Melbourne.

The Melbourne 2030 report notes that Central Melbourne depends upon the quality and capacity of the public transport system to move people to, from and around it, but it is experiencing capacity limitations that will make it difficult for the State Government to meet the target of 20 percent public transport mode share by 2020.

3.5 General Freight

The growth of general freight activity will be directly impacted by population growth and export/import activity. National and international companies in the manufacturing, chemicals, food processing and recycling sectors are well represented in Wyndham and the West. It has become recognised as the home of Australia's best known major transport and distribution companies including Toll, Patrick and Murray Goulburn, and will be the home for some of Coles Myer's distribution centres and the transport terminals for K & S Freighters and Scotts Transport.

The Department of Industry Innovation and Regional Development (DIIRD) indicates that in 1998 the Melbourne freight task involved movement of around 300 million tonnes. The Treasurer, the Honourable John Brumby MP indicated at the freight industry forum on 14 September 2005 that the road freight task in Victoria is growing at 7% per annum.

Specific information on existing and future freight movement patterns could be obtained through the Department of Infrastructure. Two sources are John Rogan, Executive Director of Freight, Logistics and Marine at the Department of Infrastructure, or Rose Elphick, Chief Executive Officer of the Victorian Freight and Logistics Council. They could provide comment on the implications of congestion and delay on businesses and the city's and State's overall economic performance, growth and development.

4. SOCIAL ISSUES

Wyndham City Council's Community Services Department has prepared a substantive report on "The Social Implications of Traffic Congestion" (November 2005). A copy of the report is included.

A summary of the principal negative social impacts are identified under the following five headings:

Sense of Community

- Longer travel times to/from work result in:
 - Individuals have less leisure time to interact with others in their community or participate in community events
 - Restricted time to socialise with people in the neighbourhood
 - Newly established areas become dormitory suburbs resulting in a lack of community cohesion

Community Services

- Many services, particularly in the health sector, are developed on a regional basis. Congestion on major traffic routes limits the ability to access the services. Specific examples include Women's Health West (a major family violence support service), migrant services, and the Western Suburbs Indigenous Gathering Place.
- Longer commute times impact on access to child care services. Services usually close at 6.00 pm.

Community Health and Well Being

- More time spent in car travel results in less time engaged in recreational activities.
- Frustration arising from traffic congestion may have consequences related to health and well being, including family violence.

Education and Skills Development

- Local employers have indicated through WynBay LLEN that two of the major barriers to young people taking up apprenticeships in the region is the long travel times and inability to access public transport.
- Transport congestion can also impact on the ability of residents in the western metropolitan region to access educational institutions (such as universities) because they require long travel distances, and therefore effectively limit choice and potentially decrease education and skill development outcomes.

Investment and Employment

- Evidence suggests that effective road and rail infrastructure are a major factor in a company's selection of sites for the relocation or expansion of their existing business operations. Such investment is a major driver of local employment.

Transport and Road Safety

- Traffic congestion impacts on driver experience making it less comfortable and accelerating feelings of frustration. Increasing experiences of aggressive driver behaviour is acknowledged with examples being 'road rage', tailgating and speeding.
- Congestion impacts on access and travel times for emergency vehicles.
- Lack of alternative routes creates bottlenecks and an increase in driver frustration due to delays.
- Drivers increase risk taking behaviours such as overtaking traffic, use of emergency lanes or overtaking stationary traffic by using the oncoming lane on a single carriageway.

5. NORTH MELBOURNE AND CITY LOOP TRAIN CAPACITY & TRAIN LOADINGS

During the preparation of the Outer Western Suburbs Transport Strategy and the Inner West Integrated Transport Strategy, it was indicated that a major constraint to the operation of train services is the track arrangements west of the North Melbourne railway station. Currently the VLine regional services from Geelong, Ballarat and Bendigo, the freight services and the Northern Metropolitan Rail Group of lines, which comprise services from Williamstown, Werribee, Sunshine, Watergardens, Broadmeadows and Upfield, all pass through North Melbourne Station.

Today 36 train services (Connex and V/line) travel to the Melbourne CBD through North Melbourne Station in the morning peak period. They carry around 15,000 passengers in this period.

It has been indicated that the available train slots through North Melbourne will be used in setting the new 2006 timetable.

Thus the available capacity is being used in 2006, but is expected to cater for the future demand from growth in the outer municipalities, as well as the additional Regional Fast Trains and freight trains.

The State Government's public transport policy is that 20% of motorised trips will be by public transport by the year 2020. The policy also states that by the year 2010, 30% of freight destined for the port will be transported by rail.

This can only be achieved by upgrading the existing services. Additional passenger trains are needed to:

- carry the additional passengers expected to be generated from population increases within the growth areas; and
- improve travel comfort (that is less crush conditions) to attract passengers.

The Department of Infrastructure has estimated that within 10 years demand will be for eight (8) more trains on the Northern Group of lines and 12 more by 2020, with the existing network effectively operating at capacity in 2006.

To manage the travel demand along the West Gate corridor requires a public transport system capable of providing travel times and frequency of service which will attract commuters from their cars. Additional trains need to be added to the system and there needs to be the capacity and capability to operate the services on the system.

Information has recently become available regarding passenger loading on the Northern Group of train lines which serve Melbourne's north and west. The information shows that the capacity of train services are exceeded on services on the Broadmeadows, Sydenham and Werribee lines. Of particular concern to Council is the Werribee line which serves the Wyndham community. Werribee has four services in the am peak that exceed the 800 load level with levels of 800, 850, 900 and 850.

What might appear the obvious solution of scheduling additional train services is constrained by capacity limitations on the rail infrastructure in the North Melbourne area where the various lines of the Northern Group converge.

A significant issue in relation to projections of future oil production and consumption is increasing the efficiency of the usage of available supplies. The metropolitan train network can be a significant element of ensuring efficiency of oil utilisation, which in turn highlights the need to minimise congestion and ensure appropriate public transport infrastructure and services.

The issue of how to operate more trains through North Melbourne needs to be investigated now, as well as how to provide the funding and to commence work in time for completion before 2010.

6. CONGESTION - GENERAL ROAD NETWORK

An initial consideration is to identify what is congestion and what is / is not acceptable travel times? The determination of what is regarded as a congested area, location or route is an important aspect. What is a congested location in Wyndham is not necessarily viewed the same by residents of Prahran or Richmond. Travel conditions within Melbourne are different compared to Geelong and Bendigo.

Two aspects that need to be recognised are that:

- off-peak road travel will be faster than peak period road travel
- it is not possible to provide the same level of service on the road network in the peak period as typically is available/occurs in the off-peak period.

In terms of a transport network it is necessary to look at the overall route and not individual intersections/locations. Solving one location often leads to increasing the problem at the next intersection or somewhere further along the route. In the 1990s VicRoads developed a network of Principal Traffic Routes. These were routes along which the objective was to improve the overall travel time along the route. The emphasis was on improved management of the route rather than individual intersections.

A potential indicator of congestion is the variability in the travel time. The variability can occur (i) at different locations along a route and (ii) in terms of the overall total travel time along the route from day to day. From a regional and State investment point of view it is the latter aspect that is important.

VicRoads has started to collect information on travel times along the freeways from the travel time display boards. It is suggested the Inquiry seek information from VicRoads on the availability of the sign board data to review travel time variations on the general network and along the Princes Freeway/West Gate Freeway in particular. It is suggested that the Inquiry review and compare the travel times for the:

- general off-peak;
- fringe peak period;
- highest peak period; and
- the variation in the highest travel times through the week.

The cost of congestion is influenced by the absolute traffic volumes and the mix of vehicle types. Commercial vehicles have a higher operating and business value than commuter vehicles. Therefore locations with a high volume of commercial vehicles are areas where attention needs to be directed.

Minor incidents typically result in an additional 10 - 15 minutes to the travel time of trucks, drivers and passengers using the freeway. These are weekly incidents. (Information from the RACV indicates that over a three year period 235 call outs were recorded to the West Gate Freeway between the Western Ring Road and the east side of the West Gate Bridge in the period 7.00 am – 9.00 am on weekdays. This equates to two incidents every three weeks.)

The economic value of this time multiplied by the number of vehicles using the freeway in that period of time over a year is significant. This is further increased by the high proportion of commercial vehicle traffic on the West Gate Freeway and the higher value of time for commercial vehicles and freight movement.

Major incidents often result in full road or carriageway closures and have an economic consequence that has not been quantified or the estimated financial costs verified to date. This year a truck with concrete slabs overturned in June 2005 on the West Gate Freeway and involved closure of the freeway carriageway for over 4 hours, whilst the floods in February 2005 closed the Princes Freeway at Skeleton Creek for almost a day. [The Princes Freeway is the umbilical cord between Melbourne and Geelong with significant economic importance and value. The storm intensity was assessed as a 1 in 30 year level resulting in closure of the freeway, whilst a residential house "(value \$200,000)" is not permitted to be constructed below the 1 in 100 year flood level.]

The siege at the Todd Road service centre three years ago crippled traffic movement in Melbourne for many hours, affecting not only travel in the West but Melbourne and all the inner municipalities. The economic and social effects were wide spread.

In developing a road network it is imperative that there are alternative routes – (i) to distribute the demand, and (ii) to provide an option if there are incidents or disruptions to the traffic flow. The lack of alternative routes:

- prevents traffic using an alternative route and reducing the higher travel times when incidents occur
- has an economic value that has not to date been considered in assessing the economic benefit of projects.

Within Wyndham there are two prime examples of this issue. They are - (i) Sayers Road and (ii) the Werribee Street/Princes Highway/railway crossing.

Sayers Road has been the only east-west arterial road that provides an alternative to Princes Freeway for access from the urban area of Werribee and Hoppers Crossing to the east. The Werribee Street/Princes Highway/railway crossing is the only arterial crossing of the railway line serving a current population of over 10, 000 linking to the freeway and the Werribee CBD.

Wyndham Council has now constructed an alternative east-west road (Leakes Road) and VicRoads has commissioned consultants to review and advise on opportunities and actions regarding the Werribee Street railway crossing.

Within the inner metropolitan area, the nature and focus of travel will result in congested conditions on the road network. The emphasis on road investment within the inner suburbs should be to improve regional travel for the overall corridor or area rather than just movement through an individual intersection or location.

If it is acknowledged that congestion is expected to occur in the inner suburbs, the issue is then where is it appropriate that the longer delays and queues occur. Aspects such as the impact on the amenity of the abutting land uses, impacts on public transport services, impacts on other traffic corridors/traffic flows, the nature of the traffic impacted (eg freight or commuters) and the opportunity for motorists to use public transport as an alternative travel mode influence this consideration.

Clear and accurate reporting to peak period travellers on road network conditions, incident locations, and public transport service cancellations provides the opportunity for travellers to reduce the consequences of these aspects. Travellers can take alternative routes (if available), delay their travel time or if available use an alternative travel mode.

7. ASPECTS THAT WILL INFLUENCE CONGESTION

7.1 Land Use Planning

Land use planning is the principal influence on travel demand. However given the current development and network that exists, it also involves long lead times before major changes in travel patterns and behaviours occur.

Melbourne's transport network and journey to work patterns are Melbourne CBD centric. This has two implications:

- because travel is oriented to a focal point it will naturally result in a congested network, and
- public and private transport infrastructure is designed to accommodate the needs of peak hour commuters. Although the infrastructure is used to varying degrees during other times of the day, it is only in unusual circumstances that the peak demand will vary from the traditional Monday to Friday morning and evening peak.

While it is accepted there are significant benefits from concentrating employment opportunities to achieve efficiencies of scale, networking, etc, the electronic age has created new opportunities which allow different ways of distributing employment and achieving far greater efficiencies of transport infrastructure.

The reverse peak office concept would see a greater focus on the development of office parks at key suburban activity centres which are well serviced by public transport and vehicle parking. The benefits would include reduced outlays for office accommodation, reduced travel for office workers, reduced congestion on the road, use of available infrastructure and services in the opposite travel direction to the peak, and significantly reduced outlays for funding infrastructure by Government.

The challenge is to change the traditional central focus of Melbourne where consistent with achieving better community outcomes. This may require incentives/disincentives from Government, greater use of electronic communication and different ways of thinking about how employment and residential living is positioned.

Residential 2 Zones have been established in the Planning Scheme to encourage medium to high density development / residential to make optimum use of services and facilities within an area. The zone encourages and supports higher density residential development through not requiring a planning permit or require advertising of unit developments. The application of R2 Zonings around activity centres is an example of a land use planning tool to support and encourage public transport usage.

To support rail travel, park and ride facilities are provided at various stations along the respective train lines. This is supported however it requires development of an overall strategy by DoI that recognises:

- the fare system (the popular stations are the last ones within the respective fare zones eg Laverton station. There is a need to develop a strategy that provides a better distribution of demand by changing fare structures, parking charges, or supply of parking spaces.)
- the catchments (the biggest catchments are at the end of the lines, therefore parking should be provided in that area.)

- the higher commercial value and higher use of land in activity centres other than commuter car parking.

These latter two aspects suggest that larger commuter car parks could be established with stations at the end of lines one station immediately after an activity centre. This has three benefits – (i) convenience for a large catchment, (ii) provides a stabling area, and (iii) does not use land which could be used for higher value uses within an activity centre. An example of this is a railway station with commuter car parking west of Werribee Station.

7.2 Mode Changes

As indicated the State Government has the objective that by the year 2020, 20% of motorised trips will be by public transport.

It is suggested that information on what will influence people to change their travel mode is needed. Movement of freight is principally influenced by financial considerations. However people are influenced by a variety of issues such as knowledge of the public transport system/network, safety/security, the travel time, the fare, other tasks to be undertaken on the journey, and many more aspects. The effect each of these aspects has will vary for different geographical areas, different travel purposes and different travel times through the day.

Currently the emphasis of the State Government's Public Transport Directorate is on travel time reliability, particularly on trains and trams. However, the recent implementation and promotion of the SmartBus projects on Springvale Road and Blackburn Road has resulted in a 30% increase in patronage. The new services involved promotion, increased frequency and faster travel times.

A stronger understanding or knowledge of travel mode decisions would assist focus resources and programs to reduce car travel.

In terms of fare structure affecting public transport travel in the outer municipalities Figure 6 shows the fares between inner, middle and outer suburbs. Residents in the outer suburbs pay a much higher fare for a significantly lower level service.

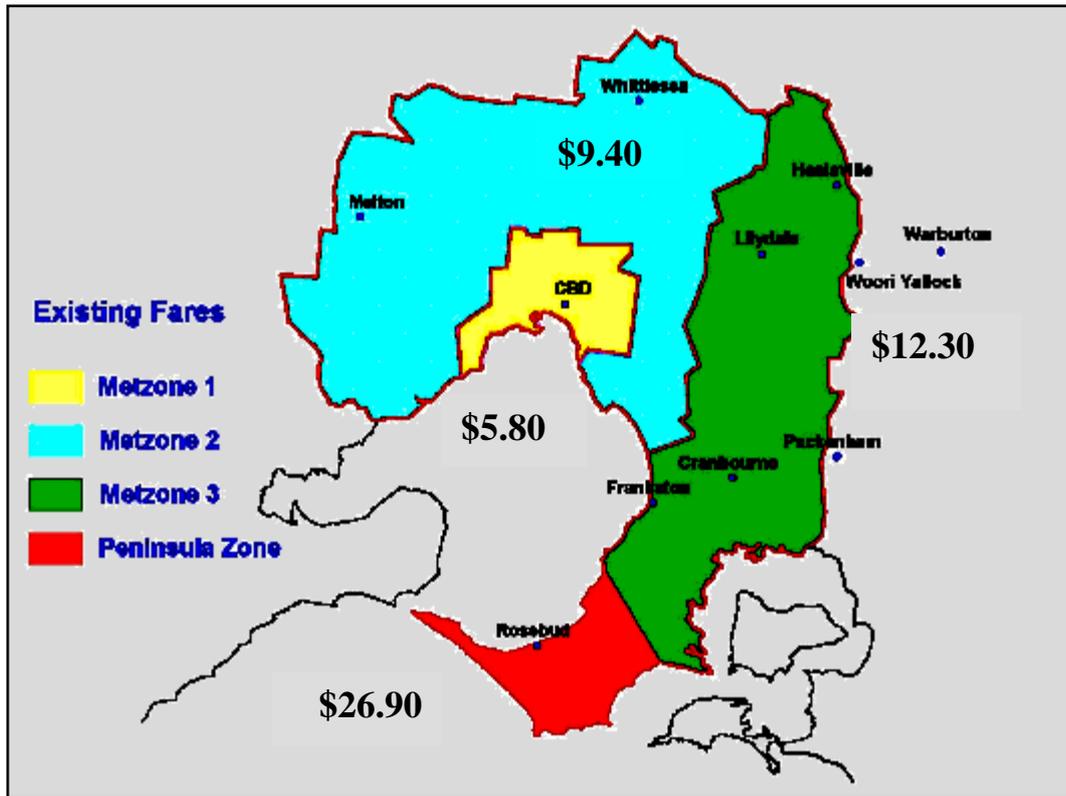


Figure 6: Fare Comparison

Figures 7 and 8 show the level of subsidy that the inner municipalities receive for public transport travel compared to the outer municipalities. In 2003 the estimated subsidy (by Graham Currie of Booz Allen Hamilton) for the inner municipalities was \$171 per person compared to \$104 per person in the outer suburbs.

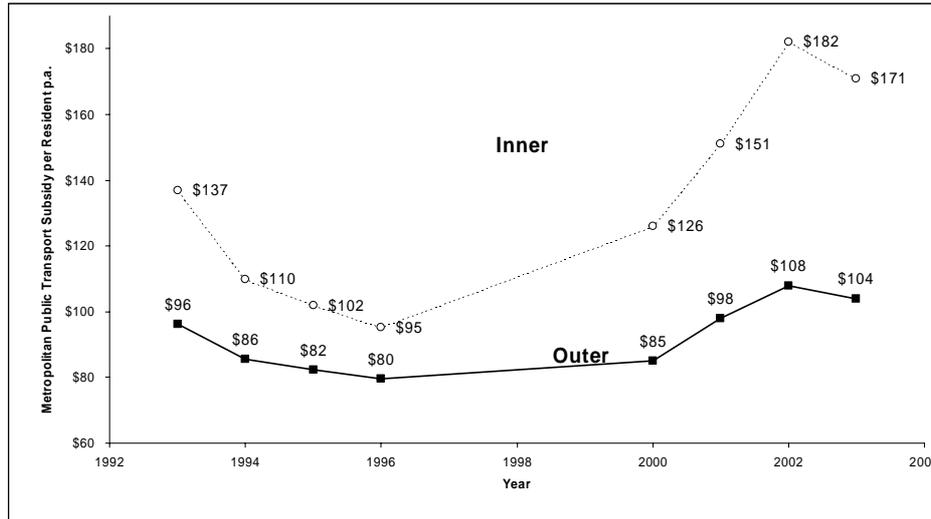


Figure 7: Funding Subsidy - Inner and Outer Suburbs (Source: Graham Currie 2004)

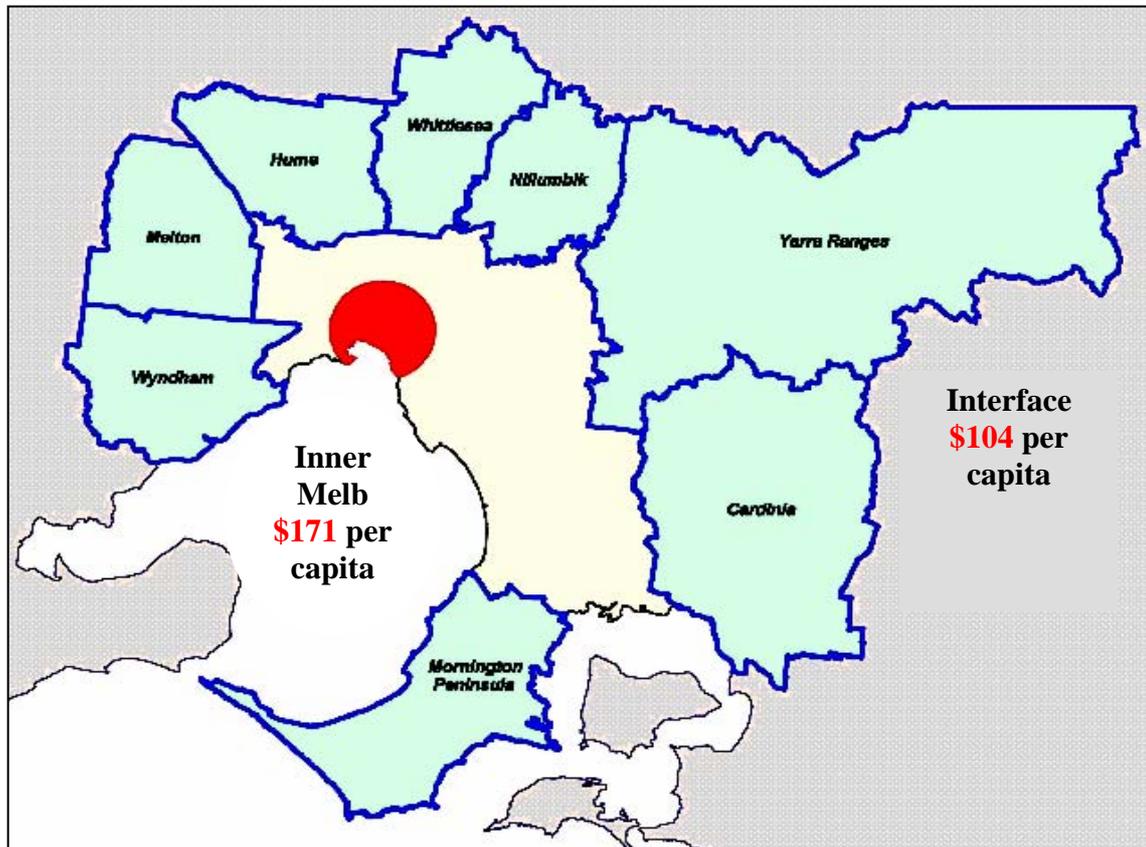


Figure 8 – Public Transport Subsidy

Public transport in the outer suburbs is based on bus services and widely spaced train lines. The bus services are typically 40 minutes to 60 minutes in the week-day peak periods, rarely operate after 7.00 pm, there are limited services on Saturdays, and there are few bus services on Sundays. The attraction to public transport is limited and pricing policies to “encourage” motorists onto public transport is questionable given the standard of service available.

7.3 Time Changes

The third dimension of travel that influences travel demand and congestion is the time of a trip. Congestion occurs due to the concentration of movements through a particular location at the same time.

The capacity exists through the day, but the peak demand typically occurs in two periods for an hour or two. There is significant capacity available out of the peak periods.

Actions to transfer the demand from the peak periods to off-peak periods provide opportunities to more efficiently use available infrastructure.

Adding demand in peak period simply adds to the need for infrastructure. This applies to both road and public transport services. Public transport has recognised this in the past with reduced fares for off-peak travel.

7.4 Pricing and Parking Controls

Ideas have been proposed to regulate travel through various mechanisms such as pricing policies and parking controls (eg limiting the availability / provision of car parking).

If undertaking such actions, it is important to ascertain the likely consequences these actions will have which then requires knowing what influences people's decisions in selecting a mode of travel.

When applying pricing and parking limitation policies to change car travel it is necessary to have a public transport system that provides an appropriate level of service. If the alternative travel mode does not exist the implication is the trip will be made to an alternative destination or not made. That addresses the primary objective of reducing congestion within that location, but reduces the economic benefit/stimulus for the principal activity centre. A clear example of this is the Melbourne CBD.

The initial proposal for a car parking limitation policy was developed in the early 1970's by Nicholas Clark in a report to the Melbourne Metropolitan Board of Works. The report noted that limiting the provision of car parking spaces required that suitable public transport services provided a realistic alternative travel mode. A car parking limitation policy should not be applied where there was no alternative travel mode or to promote usage of poor levels of public transport service.

8. GROWTH AREA PLANNING

8.1 Growth Area Review Outcomes

The State Government announced in November outcomes from the Growth Area Review process. The announcement indicated the extension of the Urban Growth Boundary in the western sector of Wyndham, the imposition of a Development Contribution for State infrastructure within the Growth Areas, and the establishment of a Growth Areas Authority.

The extension of the Urban Growth Boundary reinforces the discussion on the growth expected to occur in the west and in Wyndham.

The State infrastructure Development Contributions will provide the Government with much needed funding for infrastructure projects. However the funding must be for projects that are within the growth areas and should not be a source of funding for general metropolitan projects.

The resources, specific tasks and operation of the Growth Areas Authority are still to be developed and should be discussed with the Department of Sustainability and Environment.

8.2 Two Stage Development Contributions Schemes

Experience with the development contribution legislation initially introduced in 1995 and reviewed in 2004, has been that planning for new arterials has been difficult and the financing made more challenging by rapidly increasing land prices resulting in frequent shortfalls in the funding generated through development contribution plans, regardless of whether or not they incorporate traditional cost escalation factors.

The importance of early agreement between VicRoads and local government in relation to an appropriate arterial road protocol for a greenfield area is addressed elsewhere.

However, a second issue regarding road and railway planning is the need to establish the reservation for transport arterials at the earliest opportunity to minimise funding variations caused by fluctuating land prices and ensure that the reservation integrity is maintained.

One option which should be considered in detail is the concept of a two-stage development contribution process where an initial contribution is required at the time of rezoning to fund the acquisition of the transport reserve. This would have the effect of providing certainty, would minimise the impact of price variations and would require limited, if any, cash flow from the developer/land owner as it requires transfer of land in the majority of situations when the value of the land holdings have been significantly enhanced by the rezoning process. In cases where a monetary contribution to the transportation reserves is required with some cash flow implications, these are seen to be reasonable given the scale of issues compared to later seeking to acquire land for the transport reserves.

The second stage of the development contribution payment should continue to apply at the time of physical development of the land, and would parallel the developer's cash flow.

8.3 Land Use Planning

When developing transport and land use strategies, the process involves the prediction of land use development scenarios both spatially and for a predicted time frame. There are several comments on this process:

- The planning profession has historically been poor at predicting beyond 5 years of development activity and patterns. Various issues influence activity and development – some are not foreseeable or controllable.
- When areas are identified for particular land uses a monetary value is created. The development industry seeks areas where the land cost is less, but where it is able to achieve development certainty.
- A more suitable approach is to identify the likely development capacity of an area and assess the expected travel demands and patterns, irrespective of the time frame. This provides an indication of the quantum of travel and the travel patterns to determine the future alignments and reservation needs.
- Having identified a development scenario, the results are interpreted as to the expected result, and infrastructure is provided to meet the expected demand. However, changes to the land use distribution can change the pattern and level of travel demand. This approach of undertaking an alternative land use distribution assessment has not been done in regional planning projects.
- The initial and alternative development scenarios need to be assessed against various planning evaluation criteria. These criteria should be determined by the transport and planning professions and include aspects such as average trip distance; average trip time; greenhouse emissions; fuel consumption, etc. As part of the Wyndham Growth Area review a set of criteria was prepared that could form the base for an evaluation framework. (Criteria were also prepared for other Growth Areas and should be reviewed in such an exercise.)

8.4 Railway Reservations

An emphasis in planning the growth areas is access to and use of public transport. Growth cannot be solely along the existing railway lines. Extensions of railway lines need to be considered and identified for the existing and future growth areas. Railway line construction does not have to be in one project, but can involve incremental construction. The reservations for new railway lines or extensions of lines need to be identified in the planning of the growth areas even though it may be over 20 or more years before construction.

New railway stations also need to be planned for now. The stations need to be located for walk-up catchments, and support activity centre development where appropriate. To this end Point Cook Station is a high priority station on the existing Werribee railway line, whilst the proposal to extend the Werribee line to Manor Lakes and provide an associated station is a high priority for the future to support the proposed growth west of Werribee.

9. CONCLUSIONS AND SUMMARY

Transport is a generated activity that is strongly linked to land use planning and activity; population, employment and activity distributions are the influencing factors on the generation of travel demand.

The forecast of the increase in Melbourne's population by 2030 is not questioned. However the distribution of the growth is questioned. Information indicates that in the long term the West, and Wyndham in particular, will have significantly higher populations than estimated by the State Government. The implication of this is that greater attention needs to be given to the travel demands and infrastructure requirements for the West. Infrastructure investment for Melbourne must reflect the population growth, the economic role and performance of the West.

The most critical regional link affecting Wyndham is between the City of Melbourne and Wyndham, specifically the Melbourne CBD and Port of Melbourne, as well as Hobsons Bay and Maribyrnong.

There are two significant transport network issues affecting this regional travel demand:

- the inadequate capacity and strategy to operate additional trains through North Melbourne and the City Loop on the Northern Metropolitan Group of railway lines; and
- the need for plans to manage the future travel demand across the Maribyrnong River.

These issues need priority attention. Recent studies have not acknowledged the quantum of future development that will occur, nor the priority of those projects.

In terms of congestion on the general road network:

- Congestion will occur in the peak periods, and must be an expected consequence of the focus of travel towards the City of Melbourne.
- The road network needs to ensure there is a system of parallel or alternative routes to share the demand and provide alternative routes to bypass incidents.
- The economic cost of minor delays (weekly incidents) and major delays (long period road closures) on parallel routes should be included in the economic evaluation of road projects.
- The relief of congestion should be undertaken along a corridor rather than an individual intersection.
- There are three principal categories of actions that can be taken to reduce road congestion -
 - land use planning and activity distribution;
 - changing the travel mode; and
 - changing the time of travel.

Within growth areas the following should be noted -

- The process of two stage development contributions provides a good mechanism to provide for infrastructure within the growth areas;
- A better land use planning and transport modelling process / analysis framework is identified and recommended;
- The need to identify and plan reservations for future road and railway purposes;
- The recent announcement by the State Government of a State infrastructure development contribution within growth areas;
- The application of those funds must be for projects that are within the growth areas and should not be a source of funding for general metropolitan projects.