



# **SUBMISSION**

**TO**

**SENATE RURAL & REGIONAL AFFAIRS & TRANSPORT**

**INQUIRY INTO**

**AUSTRALIA'S FUTURE OIL SUPPLY & ALTERNATIVE**

**TRANSPORT FUELS**

**7 FEBRUARY 2007**

# SUBMISSION TO SENATE RURAL & REGIONAL AFFAIRS & TRANSPORT INQUIRY INTO AUSTRALIA'S FUTURE OIL SUPPLY & ALTERNATIVE TRANSPORT FUELS

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## 1. Introduction

The Western Transport Alliance (WeTAI) welcomes the opportunity to submit to the Transport Fuel Inquiry and specifically make comment on two aspects of the terms of reference being:

- \* flow on economic and social impacts of Australia from continuing rise in the price of transport fuel and potential reductions in oil supply, and
- \* options for reducing Australia's transport fuel demands.

The Western Transport Alliance does not proposed making comment on the Terms of Reference relating to oil production, new sources of oil or alternative transport fuels.

Transport issues facing Melbourne's West are closely linked to population growth and limitations in the capacity of existing transport infrastructure.

In 2003/04 Melbourne's West had the third and fourth fastest growing local government areas within Australian in terms of growth rate. Significantly the fastest two growing municipalities, both based in Western Australia, have total populations of less than 10,000, while Melton with a growth rate of 9.1% had a population of slightly over 60,000, and Wyndham with a growth rate of 8.4% had a population of 100,000 (now estimated to be 117,000).

### Fastest growing 10 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%
<b>Melton (S)</b>	<b>Vic</b>	<b>5,923</b>	<b>9.1%</b>
<b>Wyndham (C)</b>	<b>Vic</b>	<b>8,378</b>	<b>8.4%</b>
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

There are strong indicators that these two municipalities will continue to experience substantial growth, and an increasing likelihood that the northern growth areas of Hume and Whittlesea will also become increasingly important in terms of metropolitan growth towards the end of the current decade.

Developing an understanding of the way in which Melbourne's growth is changing is fundamental to understanding the future transportation task and the associated challenges.

Equally, it is essential to understand the capacity and constraints of the existing rail and road networks, the growth of the freight tasks, and in particular port associated activity and metropolitan employment patterns.

## **2. The Western Transport Alliance (WeTAI)**

There is widespread concern that insufficient attention has been placed on the issues of planning for future rail and road capacity, between the West and the central Melbourne and Port of Melbourne areas.

The western metropolitan councils, Melbourne City Council, businesses in the west, transport companies, Transport Workers Union and peak transport bodies have combined to focus attention on these issues. The organisations have established the Western Transport Alliance (WeTAI) with the vision statement:

*"to achieve an efficient and sustainable transport corridor progressively upgraded at a time matched to the needs of the West of Melbourne (encompassing the Western Metropolitan Region) and connections to the Melbourne CBD and Port of Melbourne".*

The organisations currently involved are:

- Brimbank City Council
- FCL Interstate Transport Services Pty Ltd
- Hobsons Bay City Council
- Maribyrnong City Council
- Martrans Company
- Melbourne City Council
- Melton Shire Council
- Moonee Valley City Council
- P & O Ports Ltd
- Patrick Logistics
- Port of Melbourne Corporation
- Queensland Rail
- RACV
- Toll Group
- Transport Workers Union
- Victorian Transport Association
- Wyndham City Council

Other peak groups have expressed interest in joining.

### **3. Critical Links in the Western Region**

There are two principal foci generating significant travel demand from/to the western region; they are the Melbourne CBD and the Port of Melbourne.

As a consequence, there are two inter-related transport network constraints impacting on the future growth and development of the West and the significant links to the central Melbourne area and the Port of Melbourne. These are:

- (i) the lack of capacity where lines converge at North Melbourne and through the City Loop for additional train services; and
- (ii) the need to increase road capacity across the Maribyrnong River.

To accommodate future train commuters and achieve the Government's policy to increase the proportion of travellers using public transport, additional train services will need to pass through North Melbourne Station. Currently there is limited ability to operate more trains through North Melbourne station.

Traffic flows across the West Gate Bridge are at or close to the traffic capacity of the bridge. This link provides the principal road access and link between the West, the central Melbourne district and the Port of Melbourne.

The constraints have social, environmental and economic impacts on the West and Melbourne, and affect:

- people's ability to travel on the road network and by public transport;
- the achievement of the State Government's clearly stated policy objectives on community travel and movement of freight in/out of the Port;
- the movement of freight generally and in/out of the Port specifically;
- four (4) of Melbourne's five (5) designated growth areas in terms of railway access, and three (3) growth areas in terms of direct road access.

Factors influencing the travel demand are:

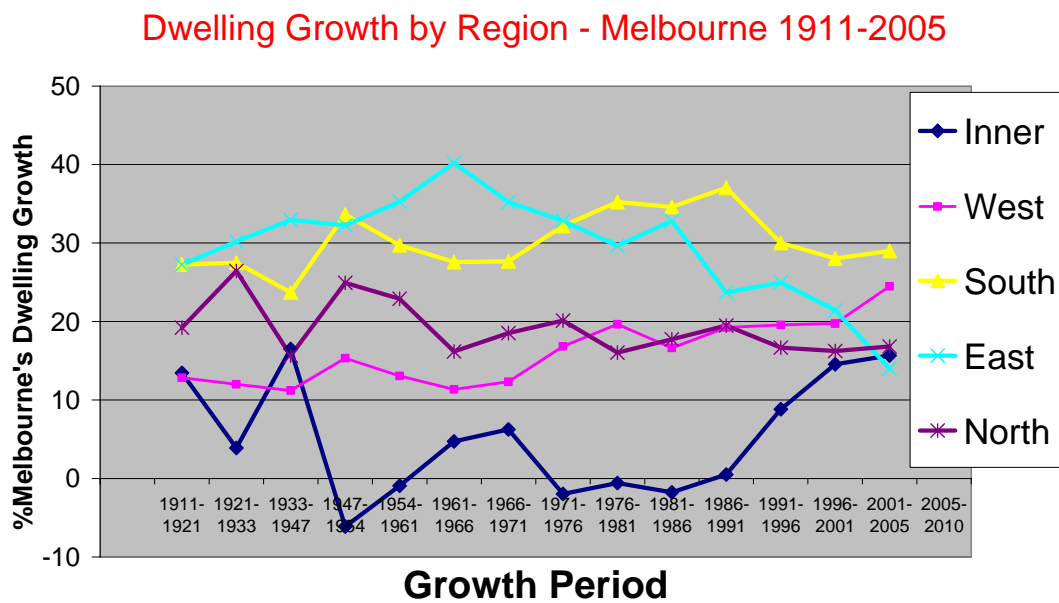
- population growth of the region
- growth of the CBD, its activities and its attraction to the west
- growth of activity in the Port of Melbourne.

### **4. Data**

The following information indicates the expected growth in population, increased port activity, road traffic flows and projections, and provides comments on train demands and other information that should be sought to confirm the concerns and views presented.

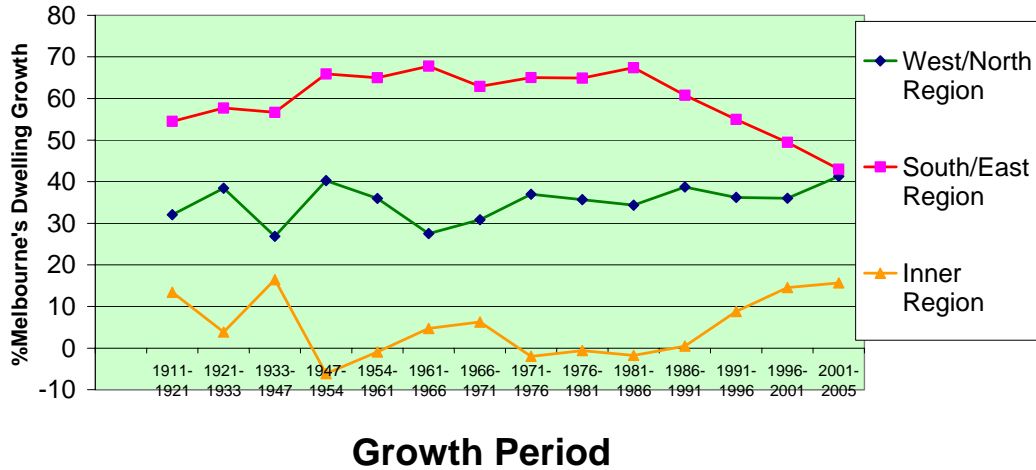
### 4.1 Population

A graphic comparison of dwelling growth by metropolitan region since 1911 shows that the north and west of Melbourne consistently experienced lower levels of growth than the south and the east, until the mid 1990's when a significant change became evident.



Comparing dwelling growth by aggregating the north-west in comparison to south-east demonstrates even more clearly the impact of the east being largely built out and the future development opportunities in the south being increasingly limited to Casey and Cardinia.

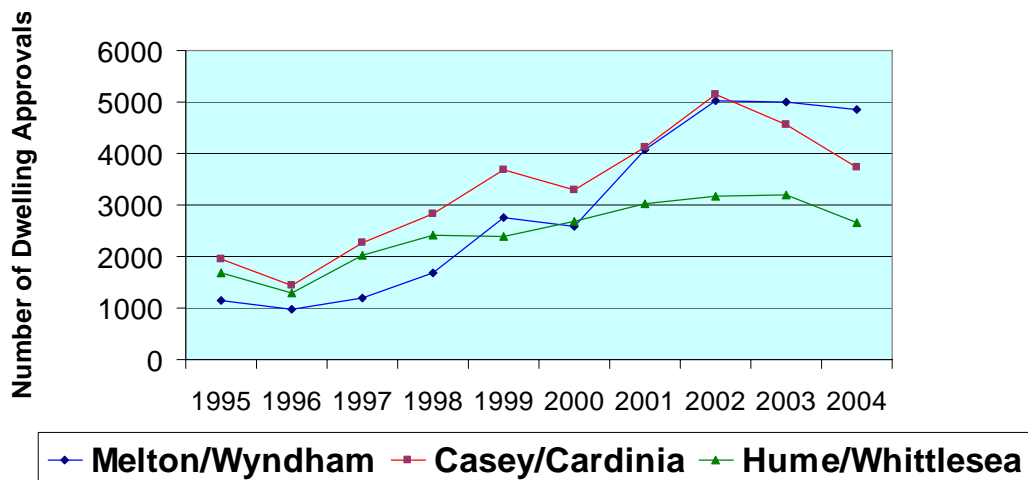
**Dwelling Growth  
North/West vs South-East vs Inner Region  
(Melbourne 1911-2005)**



These trends should not be surprising when it is considered that four of the designated five growth areas set out in Melbourne 2030 are in the north and west, but the data still comes as a surprise to many decision-makers who have a life time's experience with what is now an outdated paradigm.

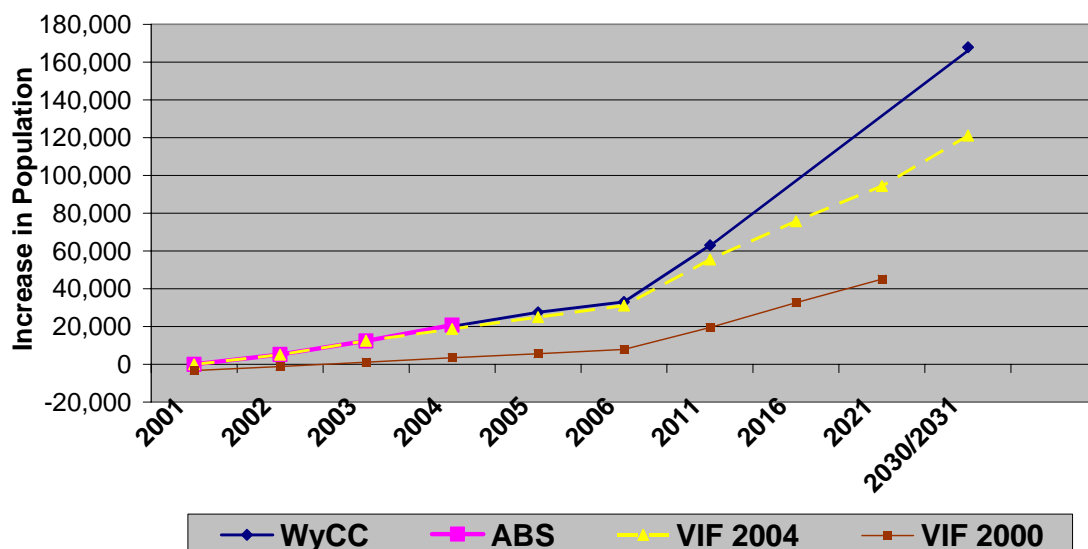
Refining the comparisons to growth areas such as Casey-Cardinia in comparison to Melton-Wyndham and Hume-Whittlesea further demonstrates the significance of recent growth in the West.

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

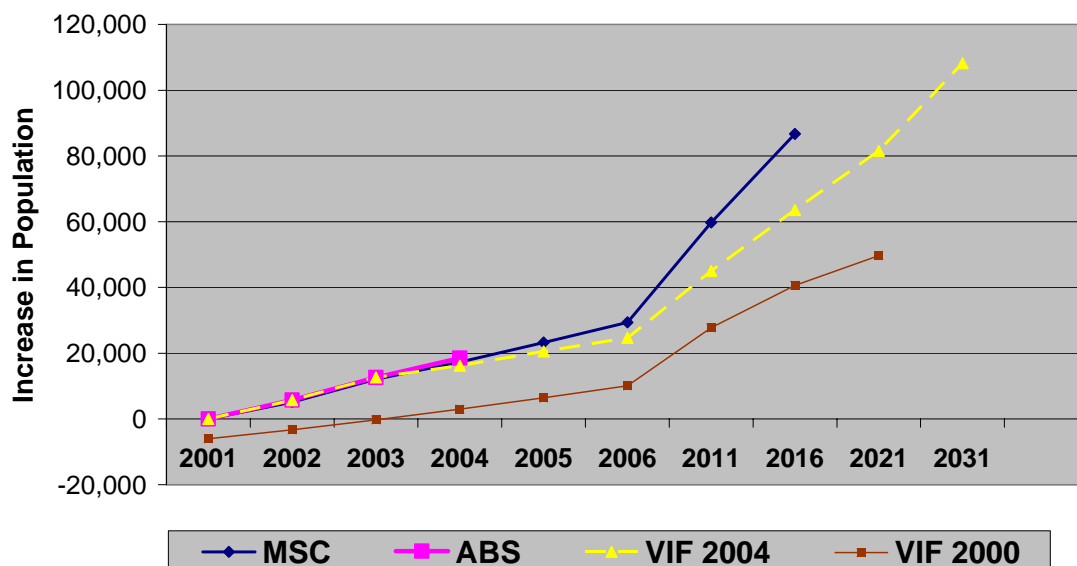


In population terms the challenge of predicting future population can be highlighted by the comparison of municipal forecasts with Victoria in Future 2000 and Victoria in Future 2004.

### Wyndham Forecast Population Increase



### Melton Forecast Population Increase



A significant concern is that the Victoria in Future 2000 population forecasts were used in two major studies:

- the Inner West Integrated Transport Strategy by the Department of Infrastructure which was commenced in December 2000 and has not yet been released, and

- the West Gate Bridge study by VicRoads which commenced in mid-2003 and has not been completed.

The implications are that the infrastructure and services proposed from the studies are required much earlier than estimated and proposed by the agencies.

Two road projects that are considered likely to impact on travel demand over the West Gate Bridge are the Western Ring Road and the future Deer Park Bypass. Anecdotal information suggests that the Western Ring Road has attracted traffic originating from the north-east (eg Nillumbik) to the south of Melbourne and to Port Phillip. Due to congestion and delays along the Western Highway and through North and West Melbourne, the Western Highway-Deer Park Bypass – West Gate Freeway will become an attractive route for traffic from the west to the port and Port Phillip region.

The Inquiry should seek information from VicRoads on the origin-destination of traffic using the Western Ring Road and the extent that traffic from the north and north-east use the bridge, and the extent of its catchment.

#### **4.2 Freight and Port of Melbourne Growth**

The growth of general freight activity will be directly impacted by population growth and export/import activity.

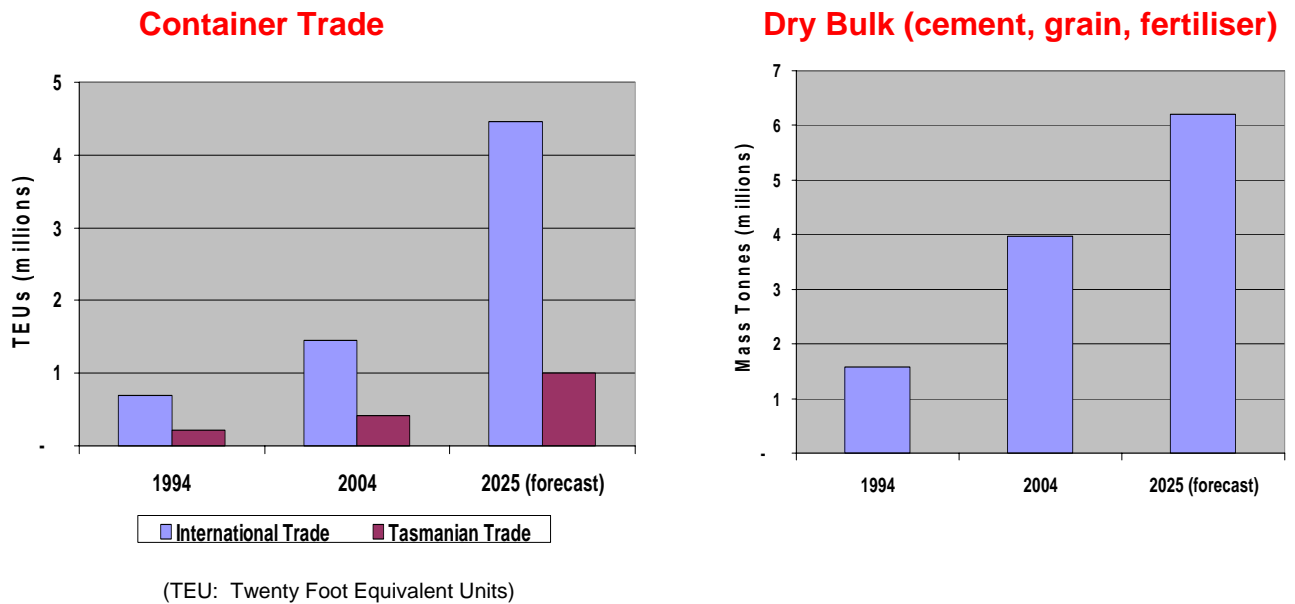
National and international companies in the manufacturing, chemicals, food processing and recycling sectors are well represented in the West. It has become recognised as the home of Australia's best known major transport and distribution companies including Toll, Patrick and Murray Goulburn, and will be the home for Coles Myer 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.

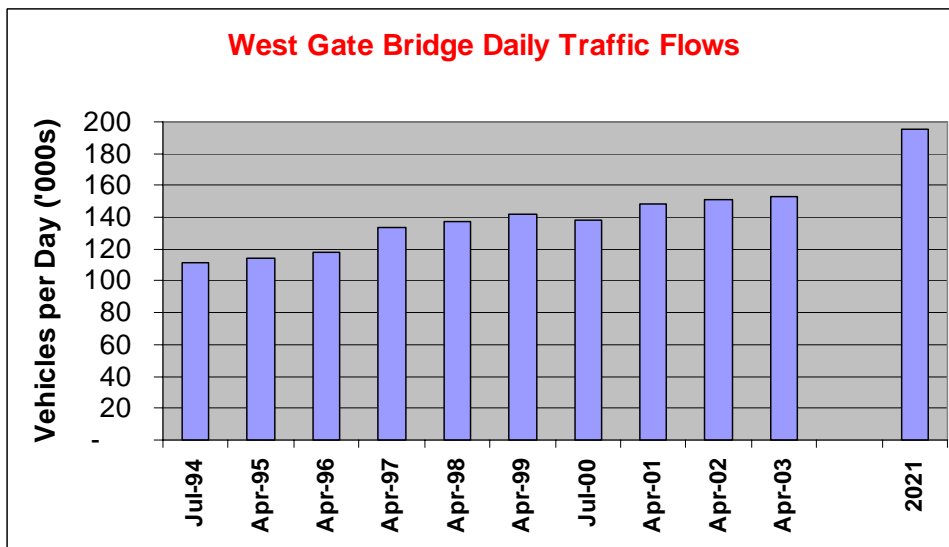
Forward projections from the Port of Melbourne show that container trade will treble in the next 20 years. A 50% increase in dry bulk tonnage is envisaged while slightly lower levels of growth are expected in relation to motor vehicles and other bulk freight activity.





### 4.3 Traffic Growth

From the viewpoint of the Western Metropolitan Councils the capacity of the road and train network is of critical importance. 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.



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

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). Therefore lengthy delays will occur to all traffic – commuters, freight, and business trips.

The immediate consequence will be an extension of the morning and evening periods in which the Bridge operates at full capacity. To accommodate these travel demands the following actions will and need to occur:

- people change travel mode to public transport, car pool/passenger, or cycle
- people will change their travel times
- people will change their destinations

There is no one solution or action. All actions are required.

#### **4.4 North Melbourne and City Loop Train Capacity**

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 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.

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.

#### **4.5 Train Loadings**

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. More specifically:

- \* Broadmeadows has five services in the am peak that exceed the 800 load limit with levels of 940, 830, 930, 1,030 and 1,070 in the period 8.00am to 8.30am. There is one evening service that exceeds the 800 level.
- \* Sydenham has six services in the am peak that exceed the 800 load level with levels of 970, 1,010, 950, 970, 960 and 890 in the morning peak and three evening services that exceed the 800 level, and
- \* 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.

#### **4.6 Travel Time Reliability**

##### Road Network

High volume/capacity ratios on arterial roads have consequences on travel reliability. An incident (breakdowns, accidents – minor property damage or more significant, or general incidents) results in long delays to vehicles using the arterial road. When there is a lack of alternative routes the consequences are greater, as traffic cannot deviate around the incident or take an alternative route.

Transport networks need to be developed to provide flexibility for travel. Focusing traffic onto one major route has serious consequences on overall travel times, delays, and travel reliability. Alternative routes are needed.

VicRoads is now collecting information from the travel time sign boards erected along the freeways. This information could and should be used to compare general off-peak travel times, fringe peak period travel times, and the highest peak period travel time each day. A review of the daily highest peak travel times should be undertaken for each week.

The issue is not the specific difference between the off-peak and peak period times. Rather the issue is the variation that occurs between the highest peak period times through the week. Large increases in travel times in these high demand periods once or twice a week are generally due to incidents.

The RACV and VicRoads have information on calls to broken down vehicles or accidents. 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. Economic losses to business from delays have been estimated at \$3 million per hour.

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.

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.

### Train Network

The capacity constraint at North Melbourne manifests itself in terms of service reliability in two ways on the train network:

- (i) If a train is late in arriving for the allocated slot at North Melbourne then other trains affected by the cross over will be subsequently delayed. (The common anecdotal comment of waiting in the railway yards.)
- (ii) If a train is cancelled, the loadings on the following train are increased and the boarding/alighting time at each station is increased. This slows the overall travel time of the train. It will arrive late at North Melbourne and impact on the other trains and line services.

## **4.7 Role of Central Melbourne**

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.

## **5. Social Issues**

Wyndham City Council's Community Services Department has prepared a substantive report on "The Social Implications of Traffic Congestion" (November 2005). The negative social impacts identified are aggregated under five headings. The main points are listed under each heading.

### **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.

## **6. Environmental Issues**

It is reported that greenhouse gas emissions from the transport sector rose by 27% between 1990 and 2002, and is predicted to rise by 42% by 2010 from 1990. The Australian transport sector accounted for 79 million tonnes of Australia's total net greenhouse gas emissions in 2002, representing 13 per cent of Australia's total emissions. About 88 per cent of these emissions came from road transport, including cars, trucks and buses.

Australia's urban rail services keep nearly 600 million car journeys off urban roads each year, saving over 3 million tonnes of greenhouse gas emissions.

Traffic congestion, noise and air pollution from car and truck emissions have serious impacts on the quality of life of a community.

VicHealth (1999) estimated that about 200 deaths per year in Melbourne are related to the effects of air pollution from road transport and that motor vehicle emissions are responsible for 40 – 90 % of the various pollutants in the air.

Results of roadside air and noise monitoring undertaken by Maribyrnong Council in the Yarraville area indicated high levels of near road emissions. Concern exists that pollution from the 20,000 trucks per day using the residential streets in the inner western suburbs, such as Yarraville, may cause long term adverse health affects on residents living along these truck routes.

Environmental and amenity issues affecting the liveability of the inner western suburbs adjacent to the port include:

- High volumes of heavy vehicles (over 30% of total traffic) using some streets day and night causing significant detriment to the residential amenity of the area.
- Environmental impacts of noise, diesel fumes and vibrations caused by high volumes and speeds of heavy vehicles.
- Hazards for pedestrians and cyclists.
- The transportation of hazardous and dangerous goods through the area.
- Inappropriate locations and operation of container storage sites with associated detrimental impacts on residential amenity.

Much of the port related truck traffic uses residential streets to avoid the congestion and other constraints on the freeway network.

## **7. Solutions**

The WeTAI has not developed specific solutions, nor is it advocating for a particular solution.

The issue of travel demand across the Maribyrnong River / Yarra River requires a range of initiatives involving increased public transport, land use planning, travel demand management and road improvements.

Recent initiatives presented by the Committee for Melbourne and the Metropolitan Transport Forum (MTF) provide ideas that need to be considered in developing solutions to these issues.

Although the 1969 Melbourne Transport Plan was over zealous in the development of a freeway network, it identified a road and public transport network and transport projects to be undertaken over time. Recent State Government Transport strategies have lacked identification of and commitment to projects. The Metropolitan Transport Plan is a guideline document indicating the principles against which it would assess transport projects. The foresight of what network issues need to be addressed and the actions to be taken to address them is lacking.

## **8. Conclusion**

The West is a major region within the metropolitan context having a significant proportion of the population growth of Melbourne now and in the future, and a significant economic base with a significant industrial sector, major links to the Port of Melbourne and the conduit for regional freight movements.

Infrastructure investment for Melbourne must reflect the population growth expectations and facilitate the economic role and performance of the region.

The two recent transport infrastructure studies undertaken by the State Government (the Inner West Integrated Transport Strategy by the Department of Infrastructure and the West Gate Bridge Study by VicRoads) appear to have used flawed information relating to population growth and forecasts (Victoria in Future 2000). The consequences are twofold:

- that the infrastructure requirements proposed are needed much sooner than envisaged; and
- an under estimation of the magnitude of the projects and actions required.

The State Government's objective for 20% of motorised trips to be on public transport by 2020, requires almost a doubling of the current patronage/mode split. A major consequence will be the need to increase services and invest in upgrading of infrastructure. Department of Infrastructure officers have acknowledged that the network constraints on the Northern Group of lines, at North Melbourne and through the counter peak City Loop tunnel means the system is effectively operating at its capacity.



To address the total travel demand across the Maribyrnong River, public transport will be a major component of the solution.

Transport planning needs to look beyond specified short and medium term horizon years such as 2010 or 2013. Planning needs to commence now for medium term actions, whilst opportunities and directions need to be identified and developed now for the long term vision. *The objective of transport planning is to provide the framework and opportunities for the future, whilst providing for the needs of the present and immediate future.*

The Western Transport Alliance highlights two primary congestion issues that impact on regional access to/from the western region. These issues are:

- the inadequate capacity, capability and strategy to provide 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 additional travel demand across the Maribyrnong River / Yarra River.

The latter involves a range of actions including attracting patrons onto public transport, land use initiatives and changes, road network improvements and demand management initiatives.

There is a long lead time, typically years, between identifying a problem, developing options, undertaking consultation, and obtaining Treasury funding. The WeTAI is highlighting that planning to address these issues needs to start now. A strategy and time frame needs to be set and maintained.

These issues need priority attention.