# investing in transport

East West Link Needs Assessment A Study by Sir Rod Eddington The Hon. John Brumby MP Premier of Victoria 1 Treasury Place Melbourne VIC 3000

#### Dear Premier.

In 2006, I was asked by the Victorian Government to conduct an investigation into the best transport solutions for connecting Melbourne's eastern and western suburbs. I accepted this challenge because I am very conscious of the importance of a modern, quality transport network to the future prosperity of Melbourne and Victoria. As a resident of Melbourne, I am also passionate about making sure that our city remains an attractive, liveable and successful place as it continues to grow.

I am very pleased to present my report - Investing in Transport - to you and the government.

I have set out my recommendations – and the evidence supporting them – in my extensive main report. I am also releasing an Overview document that summarises my findings and recommendations. In addition, I am making available online a number of very detailed supporting documents and reports.

I would like to extend my personal thanks and appreciation to the Study Team that has so capably and enthusiastically supported me throughout this investigation:

Andrea Brown Kristy Heaney Matt Phelan

Tony Canavan Mark Knudsen Geoff Rayner

Jacqueline Flitcroft Andrew Korr Leanne Seddon

Graham Gosby John Matthews

I would also like to thank the many individuals, organisations, community groups and local councils who made submissions to the study – as well as those who gave their time to assist me during site visits and consultations. I particularly thank the Victorian Government Inner Agency Advisory Group and its chair, Alf Smith, for their valuable contribution, and the specialist consultants and other advisors who provided important input to the study.

The recommendations contained in this report are my own. I know that the major transport infrastructure projects are both expensive and disruptive, but cities with inadequate transport networks pay a high economic and social cost. I hope everyone recognises that as they debate my recommendations.

I trust you will find my report informative, and a useful contribution to future transport investment in Melbourne.

Rod Eddington

Melbourne March 2008



# contents

overview – sir rod eddington	10
Study background and scope  Background Study Scope Study Area Study Process	12 12 12 12 13
List of recommendations	14
Summary of findings	16
1. melbourne - a changing and growing city	20
1.1 Economic growth and change  1.1.1 Melbourne's changing economic and industrial base  1.1.2 A strong, vibrant and growing city centre  1.1.3 Integrating Footscray with the central city  1.1.4 Shaping the city's growth	20 24 26 28 29
<ul><li>1.2 Urban growth and change</li><li>1.2.1 A rapidly growing population</li><li>1.2.2 Changing patterns of growth and density</li><li>1.2.3 Accessibility and growth</li></ul>	31 32 34 38
1.3 The new face of Melbourne's west 1.3.1 The changing fortunes of the west 1.3.2 Melbourne's east west divide	42 42 44
2. mobility matters	50
2.1 Melbourne's transport network 2.1.1 Growing with the city	50 51
2.2 Current demand for travel 2.2.2 Modes of travel 2.2.3 Commuting patterns	54 55 57
2.3 Future demand for travel	59

3. public transport - on a roll	66
3.1 Melbourne's public transport network	66
3.1.1 Rail network	66
3.1.2 Tram network	69
3.1.3 Bus network	70
3.2 Melbourne's trains – a resurgence in patronage	72
3.2.1 Why the resurgence?	73
3.2.2 Future growth and trends	76
3.2.3 A system under strain	77
3.2.4 Limits on rail capacity	79
3.2.5 Expanding rail capacity	80
3.2.6 Hitting the wall - reaching rail capacity	81
3.2.7 A new rail tunnel	83
3.3 Buses and trams – also growing strongly	85
3.3.1 Expanding bus services	85
3.3.2 Steady growth on trams	85
3.3.3 Priority issues	87
3.4 Park & Ride facilities	89
4. melbourne's roads - more traffic, more con-	gestion 92
4.1 The road network	92
4.2 More traffic	93
4.3 More congestion	96
4.3.1 Managing congestion	99
4.3.2 Congestion pricing – does Melbourne need it?	101
4.4 Looking ahead – the 'no new roads' argument	106
4.5 Melbourne's cycling 'boom'	108
4.5.1 The bicycle network	108
4.5.2 Cycling – growing in popularity	109
4.5.3 Supporting and encouraging cycling	110

5. east-west road travel	114
5.1 The demand for cross city travel	114
5.2 The main east west routes	123
5.3 Transport connections to and from the west	132
5.4 West Gate Bridge - the city's transport keystone	134
5.4.1 Melbourne's reliance on the bridge	134
5.4.2 Congestion on the bridge	136
6. moving goods - the growing freight task	140
6.1 Melbourne's growing freight task	140
6.1.1 The urban freight task	140
6.1.2 Melbourne's freight network	141
6.1.3 The size and nature of the freight task	143
6.1.4 The Port of Melbourne	145
6.1.5 Managing the freight task	147
6.1.6 Industry concerns	148
6.2 Rail freight – part of the answer, but no silver bullet	152
6.2.1 Port shuttles and the 30/2010 target	153
6.2.2 Making the shift to rail	156
6.2.3 Rail freight network issues	157
6.2.4 Future actions	158
6.3 Uneasy neighbours – truck traffic and the inner west	163
7. public transport and the doncaster corridor	168
7.1 Background	168
7.1.2 Existing public transport services	170
7.1.3 Issues raised by submissions	172
7.2 Exploring the options	176

8.	transport and the environment	182
	Climate change	182
	.1.1 Transport's contribution to GHG emissions	182
	.1.2 Modes of transport and GHG emissions	184
	.1.3 Future trends .1.4 Reducing GHG emissions from transport	185 187
0	.1.4 heducing and emissions from transport	101
8.2	Changes and challenges in the study area	198
8	.2.1 Flora and fauna	198
	.2.2 Air quality	198
	.2.3 Water quality	200
	.2.4 Land contamination	200
	.2.5 Noise and amenity .2.6 Cultural heritage	202 202
	.2.7 Opportunities from transport projects	202
	The EWLNA options	205
	.3.1 Impact of EWLNA recommendations on GHG emissions	205
	.3.2 Environmental review	205
8	.3.3 Legislative requirements	207
9.	the way forward	212
9.1	Melbourne metro - 'new generation' rail tunnel	212
9.2	Extension of the suburban network to Sunbury	216
9.3	A new east-west road connection	217
9.4	Truck Action Plan	220
9.5	DART – a new, state-of-the-art bus service for Doncaster	222
9.6	All the second s	
	New cross city cycle links	224
	New cross city cycle links  Better priority and access for public transport	224 226

9.9 Improve truck efficiency	228
9.10 Continue to implement Melbourne 2030	228
9.11 More low emission, efficient vehicles	229
9.12 Constructing and funding projects	230
9.13 Timeline of projects	232
10. Funding and delivery options	238
10.1 The financing task	240
10.2 State infrastructure investment and budget capacity	242
10.2.1 Victoria	243
10.2.2 Queensland and NSW	244
10.2.3 Major transport projects	244
10.3 Public funding capacity – revenue options	246
10.3.1 Direct project user charges	246
10.3.2 Direct charges to network users	248
10.3.3 Special levies on property owners	249
10.3.4 Commercial opportunities	250
10.3.5 Other government revenue options	250
10.4 Public funding capacity - Commonwealth	251
10.5 Private funding capacity	252
10.6 Capacity of the construction industry to deliver projects	255
10.6.1 Background	255
10.6.2 Major works	256
10.6.3 Resource implications	256
10.6.4 International construction companies	257
10.6.5 Delivering the EWLNA projects	258

appendix a	264
List of submissions and consultations	264
appendix b	268
Issues raised by submissions and consultations	268
appendix c	272
Doncaster corridor options	272
appendix d	279
Policy context	279
appendix e	283
Induced travel – a complex story	283
appendix f	284
EWLNA process	284
appendix g	290
Specialist consultant teams	290
acronyms and abbreviations	292
references	295



## overview - sir rod eddington

The Melbourne of today is a successful city. That success is built in part on the transport decisions and investments made by previous generations - and it is a legacy that has served Melbourne well.

Making the right decisions about the future of Melbourne's transport network is about much more than predicting and providing for greater travel movements over the coming decades. It is about the significant economic, social and environmental benefits that will be generated by the appropriate transport infrastructure. It is also about investing in the transport connections needed to support the development of a more innovative, competitive and sustainable city.

In 2006, the Victorian Government asked me to investigate the best solutions for improving transport connections across Melbourne's east-west corridor. In meeting this request, I have taken the view that the East West Link Needs Assessment (EWLNA) should be more than another transport planning study. That is why I have adopted an approach that explores not only existing and future travel patterns, but also the economic and structural changes influencing those patterns and the types of journeys that will drive Melbourne's economy and shape the future of the city.

I have identified a number of factors that will be critical to Melbourne's growth and prosperity over the next 30 years:

- Melbourne's strong economic and population growth means that there will be a very substantial increase in demand for travel - by public transport and by private motor vehicles. It also means substantial growth in the volume of freight being moved around Melbourne and to and from the city's ports and airports.
- The nature of Melbourne's economy is changing. The city's economic success is increasingly less dependent upon traditional industries such as manufacturing and more dependent upon 'knowledge' and 'business' services. This shift to a services economy is generating different patterns of travel to ensure good access to skilled workers, to other services, to business clients and to national and international markets.
- Networked cities are the cities of the future. In the years ahead, Melbourne will need a flexible, fully connected transport network to reduce road and rail congestion and to support the economic journeys that are critical to a modern economy.
- The vibrancy and strength of central Melbourne will continue to be critical to Victoria's prosperity. Many high income, highly sought after jobs will continue to be located in the CBD and inner urban region (including growing precincts such as Parkville and Docklands). This will place further pressure on peak period transport connections to the central city.

- Melbourne's density is an important factor in its future success. More dense and compact cities generate less demand for travel and save on infrastructure costs - savings that translate into improved competitiveness and stronger economic growth.
- Melbourne's long-term prosperity will require the city to find new ways to succeed and grow in a carbon-constrained world. Higher levels of investment in public transport are vital, as is the development of urban areas that are conducive to walking and cycling. However, the evidence is clear that the number of trips made by car in Melbourne will increase by a substantial amount for the foreseeable future - and the city's road network must be able to cope with this increasing demand in an efficient and sustainable manner.

These 'future signposts' provide guidance about where transport investments will generate the most value for Melbourne. They also have specific implications for the EWLNA. In particular, I have taken the view that any transport proposals put forward by the study must make a substantial contribution

- Improving opportunities in Melbourne's west and supporting the strong population growth taking place in the west. As analysis undertaken for this study shows, Melbourne is a city with a significant east-west divide. Aside from historic issues of social disadvantage, this divide leads to reduced opportunities for jobs and business growth in the west.
- · Supporting the growth and consolidation of Melbourne's 'knowledge centre' around Carlton and the Parkville precinct. This area, with its unique concentration of world class research institutes, teaching hospitals and universities, will be critical to Victoria's leadership in industries such as biotechnology, medical research, health services and education.

I am very conscious that this report comes at a time of heightened interest in, and awareness of, climate change. My strong view is that we must move towards a situation where substantial cuts in emissions are made by the transport sector and where transport users meet all their external environmental costs. The full range of measures needed to achieve this goal is beyond the scope of this study; however, I share the views of the Stern Review and others that the significant social and economic benefits of transport must be acknowledged in assessing how, where and when emissions reductions should occur.

The EWLNA Study Team has also assessed the environmental impacts of all options considered by the study, as well as giving close attention to issues of community and neighbourhood amenity.

As required by my terms of reference, the Study Team has fully explored the existing and potential demand for travel across Melbourne and within the Study Area. I have taken into account the characteristics valued by Melburnians as they move around the city: reduced travel times, reliability in travel times, reasonable costs, comfort, safety and security. I have endeavoured to strike a balance between the high value Melburnians place on their personal mobility and the economic, social and environmental factors that will secure Melbourne's future success.

I want to make clear that I do not support – and I have not adopted – a 'road versus rail' approach to transport planning. I do not consider this to be a helpful or realistic distinction. Instead, I have examined which modes of transport best fit the journeys that are important to Melburnians: for example, rail services are clearly effective at getting large numbers of people to and from workplaces in the central city, but are much less effective at meeting other travel needs. Instead of favouring one mode over another, I have looked for the right combination of modes that offer the best options for meeting Melbourne's eastwest transport needs over the next 30 years. For these reasons, I have focused strongly on increasing access to the central city by public transport.

I have made two major infrastructure recommendations:

- A new 17 kilometre rail tunnel linking Melbourne's fast-growing western and south-eastern suburbs – a generational 'step-up' in the city's rail capacity and Melbourne's first 'metro' style passenger line.
- A new 18 kilometre cross city road corridor that provides a much-needed alternative to the West Gate Bridge, while also delivering substantial economic, transport and amenity benefits to Melbourne.

I have also recommended a number of smaller initiatives that will help to address transport issues in the east-west corridor.

In making these recommendations, I have developed options that focus first on solving current transport problems, but that will also contribute to fixing future problems. I have also aimed to develop options that make better use of Melbourne's existing transport infrastructure and that leave open opportunities to build further on that infrastructure in the future.

It is important to understand that (as directed by my terms of reference) my report is not intended to be a list of transport priorities or a broad transport strategy for Melbourne or Victoria. My recommendations focus on new east-west connections within a defined Study Area and I believe there is a strong case for the initiatives I am proposing.

It should also be noted that the infrastructure projects I have recommended come with major construction impacts, something that is unavoidable when 'retro-fitting' large-scale transport projects into the middle of an established, modern city such as Melbourne. While most of these impacts are temporary, Melburnians need to make some critical decisions about whether they are prepared to endure this short-term disruption for the long-term benefits these projects will deliver.

The Victorian Government also needs to make critical funding decisions if it is to meet growing community demands for improved transport, particularly public transport. New sources of funding will need to be found - including increased state borrowing and other potential revenue options that I have identified in my report.

My recommendations are grounded in extensive research and modelling carried out by the Study Team and a group of expert consultants. They take into account the many submissions forwarded to me by individuals, local councils, community organisations and business groups. I thank all those who made submissions to the study and those who met with me or members of my team. I recognise that not everyone will agree with my recommendations, but I believe they deserve fair consideration as a balanced and measured response to tackling some of Melbourne's major transport dilemmas.

The evidence is clear: doing nothing is not an option. Melbourne needs better east-west transport connections to address core congestion problems within the transport network, to meet rapidly increasing travel demand, to support a growing population and to keep pace with the changes taking place in the city's economic and urban structure. The evidence is also clear that a failure to take action will undermine Melbourne's future prosperity and reduce the benefits being generated by the city's growth and development. Yes, the cost of improving these transport connections is substantial – but the cost of inaction is far greater.

Making transport decisions that extend well into the future requires bold thinking. I believe that my report reflects such thinking and planning – and that my recommendations represent the 'next generation' of transport investment needed to secure Melbourne's continuing success. I strongly believe that by taking these actions, we will not only ensure that Melbourne is much better placed to manage rapid growth and change – we will also create a very significant transport legacy for the city's future.

Rod Eddington

Melbourne March 2008

## Study background and scope

#### Background

In March 2006, as part of its Meeting Our Transport Challenges action plan, the Victorian Government announced the appointment of Sir Rod Eddington to lead the East West Link Needs Assessment (EWLNA) – an independent investigation into the best transport solutions for connecting Melbourne's eastern and western suburbs. In early 2007, the Government established a Study Team to provide support and expert advice to Sir Rod Eddington in preparing his report.

In making its decision to establish the EWLNA, the Government noted the following:

- Over the last ten years, there have been two major east-west road developments in Melbourne: the linking of the Monash and West Gate Freeways (via CityLink) and the Western Metropolitan Ring Road. The majority of east-west traffic is carried on these two links, which experience significant congestion during peak periods. Currently, this congestion represents 60 per cent of Melbourne's total freeway congestion.
- The Monash CityLink West Gate corridor is one of Victoria's more important road connections, providing access to Melbourne's CBD from the south-east and the west, as well as being a vital link between the east and west of the city, and an important connection to Melbourne for Geelong and western Victoria.
- Melbourne is heavily reliant on the corridor as the only major east-west link that supports freight and private travel between Melbourne's western and south-eastern suburbs. Strong growth in suburbs along the route and increased freight through the Port of Melbourne are putting significant pressure on the corridor and surrounding arterial roads. While the Government's \$1 billion Monash -CityLink - West Gate improvement package will enhance the corridor's capacity over the next four to five years, full capacity will be reached within two decades.
- The Victorian Government continues to give high priority to public transport and has made a substantial commitment to improving Melbourne's public transport network, including an expansion of cross-town bus services and upgrades to boost rail capacity. Public transport solutions are essential to improving travel along the corridor, to reducing congestion in Melbourne's CBD and improving amenity in local communities.
- · While previous studies have examined sections of the eastwest corridor, it is responsible and prudent to investigate the needs of the whole corridor and to carefully evaluate the various proposals that have been put forward to improve Melbourne's east-west connections, including tunnels, railway extensions, buses and freeways.

Against this background, the Government recognised that an additional east-west link will be needed in the future and that an independent study offered the best opportunity to assess the long term transport requirements of such a corridor and to develop options to meet future demand for travel across Melbourne.

The EWLNA is also set within the broader strategic context of Commonwealth, Victorian and Local Government policies - policies that will influence the development and implementation of transport improvements in Melbourne's east-west corridor. The Study Team has carefully considered these policies and their objectives, and has built them - where appropriate - into the study's framework for assessing and recommending options. Further detail on these polices can be found in Appendix D.

#### Study Scope

With specific reference to an additional east-west transport corridor for Melbourne, the Victorian Government asked Sir Rod Eddington to inquire into and report on:

- 1. Current transport volumes and patterns, and the likely changes to these volumes and patterns over the next 30 years, including the impact of Melbourne 2030, other Government policies and anticipated economic growth
- 2. The capacity of existing and planned infrastructure to meet these future transport requirements
- 3. How to balance the needs of freight traffic with the needs of residents in areas adjacent to freight movements
- 4. Development of options to address capacity constraints and future demand, future needs of port and associated commercial traffic including the Government's 30/2010 target, and opportunities for public transport in the corridor
- 5. In developing options, consideration will be given to a range of measures to meet future demands. Contribution to the achievement of *Growing Victoria Together* transport targets will also be considered as part of the assessment
- 6. Funding issues, including sequencing of projects according to public and private funding capacity, and the capacity of the construction industry to deliver.

The Government also asked Sir Rod Eddington to undertake community and stakeholder consultation as part of the review.

#### Study Area

The core Study Area for the East-West Link Needs Assessment extends from the Western Ring Road at the Deer Park Bypass to east of Hoddle Street at the Eastern Freeway. This area has been defined to include the local communities and suburbs that are likely to experience the greatest impacts from any additional east-west links.

While focused on this core area, the Study Team has also considered the many external influences that impact on the area (such as climate change, and the movement of freight across Melbourne and Victoria). The Team also explored the likely effect of improved east-west connections on Melbourne's economic growth and urban development.

The Study Team received some specific ideas and proposals that were outside the study scope, such as the completion of the Metropolitan Ring Road. these proposals have not been considered by the EWLNA.

#### Study Process

In March 2007, Sir Rod Eddington released a Study Overview for the East West Link Needs Assessment. The Overview outlined the key issues to be canvassed by the Study Team and invited interested persons or groups to make a submission.

The Study Team received and considered more than 130 submissions. Sir Rod Eddington and/or members of the Study Team also met with around 70 stakeholders, including business and community groups, corporations and local councils. Appendix A lists all submissions received and consultations undertaken by the Study Team; Appendix B sets out a summary of issues raised by submissions and consultations. Submissions can be viewed at the EWLNA website.

The EWLNA Study Team commissioned seven specialist teams to undertake research, provide expert advice and assist in developing and testing options to meet future transport needs in Melbourne's east-west corridor. Appendix G lists these teams. Full copies of relevant reports prepared by some of these teams are available at the EWLNA website.

The Study Team conducted its investigation in three phases:

- Phase 1 examined the current situation in the Study
  Area, explored existing and future drivers of the demand
  for transport along the east-west corridor and identified
  problems in meeting that demand. Phase 1 also generated a
  broad range of transport options and developed a framework
  to assess these options. During this phase, the Study Team
  also examined how Melbourne's economic growth and
  changing demographics are influencing the demand for travel.
- Phase 2 involved an appraisal of a number of options, including developing options to engineering feasibility stage and undertaking modelling to ascertain the impacts, costs and benefits of each option. Options were then narrowed down to a set of final proposals that best met the EWLNA terms of reference.
- Phase 3 fully developed, appraised and analysed the final proposals using detailed transport modelling, high level costing and options for financing, delivery, sequencing and governance.

In conducting its investigation, the Study Team adopted a time frame of 30 years and beyond.

Further detail about the assessment and modelling process adopted by the Study Team is set out in Appendix F.

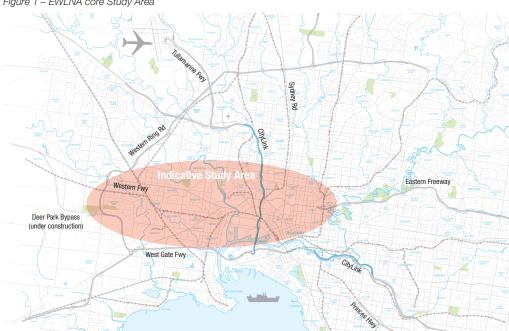


Figure 1 – EWLNA core Study Area

#### List of recommendations

The EWLNA has made 20 recommendations. which are listed below. Full details of these recommendations are set out in Chapter 9.

#### Recommendation 1

Planning work should commence for the staged construction of a new 17 kilometre Melbourne Metro rail tunnel linking Melbourne's booming western and south-eastern suburbs and providing a major increase in the capacity of the rail network.

#### Recommendation 2

The Victorian Government should bring forward the construction of a new rail connection from Werribee to Sunshine (the Tarneit link) to significantly improve the frequency and reliability of services from Werribee, Geelong, Ballarat and Bendigo.

The Government should commit to using the new rail tunnel and Tarneit link as the foundation for extending the metropolitan rail network further to the west within the next 15 years.

#### **Recommendation 3**

During the planning and construction of the rail tunnel, the Victorian Government should continue to make better use of the existing network to increase capacity, including commencing work on the electrification of the network to Sunbury to boost services on the Sydenham line.

#### **Recommendation 4**

Planning work should commence on the staged construction of a new 18 kilometre cross city road connection extending from the western suburbs to the Eastern Freeway.

#### Recommendation 5

Community amenity in the inner west should be restored by implementing a Truck Action Plan to remove truck traffic from local streets in the inner west. The plan should include a series of targeted road improvements that form an effective bypass around residential areas, reinforced by local truck bans.

#### **Recommendation 6**

Public transport to the Doncaster region is best provided by rapid, high quality bus services, additional bus priority measures and a major new bus-rail interchange at Victoria Park. To deliver this standard of services, the DART upgrade announced in the 2006 Meeting Our Transport Challenges plan should be introduced as soon as possible, along with additional service enhancements and bus priority measures undertaken in conjunction with Recommendation 4.

#### Recommendation 7

A number of specific links should be progressively built to improve cross city cycle connections and cater to the growing number of Melburnians cycling to work.

#### **Recommendation 8**

The Victorian Government should work with local councils and relevant agencies to escalate city-wide implementation and enforcement of priority measures for trams and buses.

#### Recommendation 9

A dedicated fund should be established to facilitate the development of Park & Ride facilities, with priority given to improving access to rail services in Melbourne's west and facilitating public transport patronage in the Doncaster corridor.

#### **Recommendation 10**

The Victorian Government should re-evaluate its 30/2010 rail target (which aims to move 30 per cent of freight from and to all Victorian ports by rail by 2010), given the clear finding by the EWLNA that it cannot be met. The Government should create a new strategy and work with industry to develop and implement a detailed action plan for moving more freight by rail.

#### **Recommendation 11**

The Government should take action to increase rail's share of freight by:

- Ensuring the development of a single, common user, interstate, intermodal freight terminal north of the city on the Melbourne to Sydney rail corridor
- Developing the standard gauge rail freight network to connect the interstate intermodal terminal with the key metropolitan freight hubs
- Making and announcing concrete planning decisions about the future sites for metropolitan freight hubs
- Ensuring that all future transport plans build in the connection of the Port of Hastings to the interstate standard gauge rail network.

#### **Recommendation 12**

The Port of Melbourne Corporation should be given overall responsibility for implementing an intermodal hub network in Melbourne, including responsibility for achieving the Government's revised rail freight target.

#### Recommendation 13

Given the projected increase in the metropolitan freight task, the Government should take further action to improve the efficient movement of road freight by permitting the introduction of high productivity freight vehicles on designated routes.

#### **Recommendation 14**

The Government should continue to implement *Melbourne* 2030 and take stronger action to accelerate the development of vibrant suburban hubs in Melbourne's west, particularly Footscray, Sydenham, Sunshine and Werribee.

#### **Recommendation 15**

Through the Council of Australian Governments – and working with the Australian automotive industry – the Victorian Government should pursue measures to bring Australia into line with European  $\mathrm{CO}_2$  emissions standards for motor vehicles.

#### **Recommendation 16**

The Government should develop a clear strategy for increasing the proportion of low emission, efficient vehicles operating in Melbourne.

#### **Recommendation 17**

The Victorian Government should seek early discussions with the Commonwealth Government regarding a funding contribution from AusLink towards some or all of the EWLNA recommended projects.

The Government should also work with the Commonwealth to extend AusLink to transport projects designed to relieve urban congestion.

#### **Recommendation 18**

The Victorian Government should consider a funding structure for the proposed new Metro rail tunnel that includes contributions by beneficiaries (including public transport users and property owners across Melbourne).

#### Recommendation 19

The Government should re-evaluate its current road tolling policy to ensure that the long term benefits of new road investments can be fully realised (including public transport priority, improved cycling opportunities, road network balance and improved local amenity).

#### **Recommendation 20**

A single statutory authority should be created to deliver the EWLNA recommended projects, using a 'corridor approach' to planning, managing and delivering the full suite of projects.

## Summary of findings

As Melbourne's economy and population grows, so too will the demand for travel within the city.

Over the next 25 years – with at least 1 million more people living in the city - the demand for travel in Melbourne will grow by more than 30 per cent. There will be more and more people travelling to work by train, more people using trams and buses, and many more people driving around the city for work, business, social or recreational reasons.

Alongside this strong population growth, Melbourne's economic and industrial base is changing - shifting away from traditional manufacturing towards services, knowledgeoriented industries and more advanced manufacturing with a high-technology base. This shift is also driving growth and change in the way people travel around the city, with more emphasis on distribution and logistics, face-to-face contact, fast and efficient international connections and industry clustering. Amongst other things, these changes are generating more travel outside traditional peak periods.

While there has been a major resurgence in train travel in recent years - a resurgence that is likely to continue cars will remain Melburnians' preferred mode of personal transport for the foreseeable future. Over the next 25 years, the overall demand for car travel in the city will increase

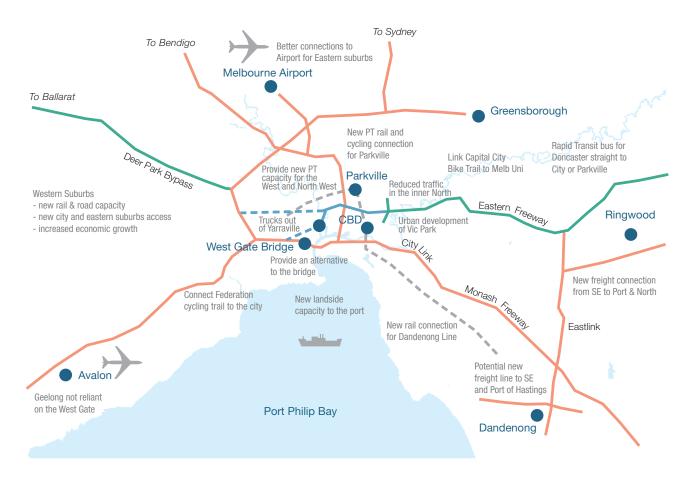
by 30 per cent, making access to an efficient, safe and well-managed road network indispensable in the daily lives of the vast majority of Melbourne's residents.

With strong growth and development taking place in Melbourne's inner city, and the western and south-eastern suburbs, these areas will experience the greatest growth in travel. In particular, Melbourne's west - which is undergoing a major transition - will face considerable travel pressures due to its limited transport connections with the CBD, the inner and middle-east and the Port of Melbourne.

As Melbourne grows, so too will the need to move goods around the city. Melbourne's overall freight task will increase by around 3 per cent a year from now until 2020 and the amount of freight carried by road will grow by more than 50 per cent.

This strong growth in the movement of people and goods around the city means that major new investment is needed to ensure that Melbourne has a reliable, flexible, efficient and fully connected transport network - one that not only supports future transport demand, but that also makes a contribution to Melbourne's future success.

In relation to cross-city (or east-west) travel, new investment is needed to address some of the major transport-related problems facing Melbourne:



- The growing demand for train travel is placing the rail network under considerable strain: The recent major resurgence in train travel shows no signs of slowing and is putting the rail network under pressure during peak periods. Capacity constraints on the rail system mean that, even after interim measures are taken, the Northern and Caulfield Rail Groups will shortly 'hit the wall', with demand outstripping available capacity some time in the next 10 years. Capacity constraints in the inner core of the network also preclude line extensions to the western suburbs. With demand for public transport likely to continue to grow, Melbourne's rail network must be expanded.
- Melbourne is over-reliant on the West Gate Bridge: Melbourne's transport network is highly vulnerable to constraints and disruptions on the West Gate Bridge. At present, even a minor incident on the bridge can have a costly and highly disruptive effect – bringing traffic across the inner west to a halt and spreading across the city's entire transport network. In the longer term, a major incident that rendered the bridge unavailable for an extended period of time would have potentially catastrophic economic repercussions that would extend well beyond Melbourne. Growing congestion on the bridge during peak periods is also having negative economic and business impacts. There is a need for an alternative to the bridge.
- Road congestion is growing: Increasing levels of demand for travel are already generating congestion on Melbourne's road network and the problem will worsen as the city's population grows. While some congestion is unavoidable in a large, growing city like Melbourne, it also imposes substantial costs on the city most of which are borne by business. The failure to reduce congestion levels over the coming decades will have serious economic, social and environmental repercussions for Melbourne and for Victoria.
- There is no connected east-west link across the north of the city: Strong and growing demand exists for trips across the city (from the west to the east and vice versa), with at least 210,000 vehicles making daily cross-city journeys of varying lengths. Current routes are disconnected and often run along inappropriate suburban streets, forcing people to seek alternative routes as they try and wend their way across town. As well as placing key east-west roads under increasing pressure (leading to significant congestion), this growing volume of cross city traffic also leads to a large amount of 'rat running' through streets in Melbourne's inner north.

- Transport issues are more pressing in the west: Strong population growth is outstripping local employment growth in the city's west, creating significant travel pressures as more people travel to the city and to the inner- and middle-eastern suburbs for work or business. These pressures are exacerbated by the limited number of road crossings over the Maribyrnong River. Relatively poor transport accessibility is holding back the west from attracting businesses and developing more local jobs. Improved transport connections are critical to supporting growth in the west and reducing Melbourne's 'east-west divide'.
- The freight task is growing rapidly: With the freight task predicted to grow by 50 per cent by 2020 and container volumes through the Port of Melbourne likely to increase fourfold, there is a need to manage freight movements through Melbourne more efficiently. This will require improved road and rail connections to the port, finding ways to reduce the number of heavy trucks on Melbourne's roads and developing a clear plan to move more freight by rail. There is also an urgent need to address the level of truck traffic through Melbourne's inner west.
- Connections to the city's airports are becoming more critical: Melbourne International Airport and Avalon
  Airport are forecasting substantial passenger growth.
  While air freight passing through these gateways and through Essendon Airport will remain relatively small in volume, it will continue to increase in importance for the transportation of high value and urgently needed goods. Travel time reliability is absolutely critical for airport connections, which are already being affected by growing congestion on the West Gate-CityLink-Monash corridor, the Western Ring Road and the Metropolitan Ring Road.
- Public transport services to Doncaster need improving:
   Public transport from Doncaster to the central city does not fully meet the needs of residents, with existing bus services running infrequently and providing lower levels of service off-peak and on the weekends. Improvements to public transport along this corridor are needed and should aim to achieve patronage levels at least as high as adjacent areas.
- Commuter cycling is booming and should be encouraged: While coming off a relatively low base, there has been a substantial increase in commuter cycling in Melbourne in recent years. This is a welcome development and should be encouraged by addressing gaps in the east-west cycling network that act as a disincentive to more people cycling to work.

To address these and other issues, the EWLNA is recommending two large, 'next generation' rail and road infrastructure projects, along with a number of other significant investments and initiatives. These investments will help to ensure that the city's transport network is capable of supporting Melbourne's strong population growth, as well as helping to secure the future drivers of economic growth and prosperity across the city.