

Tunnel Vision or World Class Public Transport?

How cancelling the East West Link can fund better transport alternatives for Melbourne.

A public report authored by:

Professor Jago Dodson, RMIT University
Professor Nicholas Low, University of Melbourne
Mr John Odgers RMIT University
Professor David Hayward RMIT University
Mr Roger Taylor, independent researcher
Dr John Stone, University of Melbourne
Professor Brendan Gleeson, University of Melbourne
Professor Graham Currie, Monash University
Dr Crystal Legacy, RMIT University
Dr Sophie Sturup, Jiaotong-Liverpool University (University of Melbourne to July 2014)

Contents

| | | |
|----------|---|-----------|
| 1 | Introduction | 3 |
| 2 | Background on East West Link | 4 |
| 3 | Financial Problems with the East West Link | 7 |
| 4 | Funding availability without the eastern section of the East West Link.. | 9 |
| 5 | An Alternative Transport Strategy | 11 |
| | Buses to fill network gaps | 11 |
| | Rail tracks and signals | 13 |
| | Public transport governance | 13 |
| 6 | Summary and conclusions | 14 |
| 7 | References..... | 15 |

1 Introduction

This report is about Melbourne's transport future. Our concern is the largest transport infrastructure project in the State's history and the most expensive per kilometre in the nation's history: the East West Link (EWL). We argue it should be abandoned, with savings being used to fund a new, more effective public transport policy direction.

The authors of this report are a group of transport planning and financial experts including from RMIT University, the University of Melbourne and Monash University. We share a deep concern over the way Melbourne's transport future has been unduly captured by a single project, the proposed East West Link (EWL), where the ends (better transport) have been given second place to means, in this case a private public partnership involving a secret contract signed on the eve of a State election.

We argue that there are viable alternatives to improving Melbourne's transport that are less costly and can deliver results much more quickly than the EWL. These options avoid expensive and unnecessary infrastructure construction and would ensure a more efficient use of public funds with a fairer distribution of transport improvements across Melbourne.

The remainder of this report is organised as follows. First we discuss current transport planning in Melbourne and the EWL. We offer a brief assessment of the EWL's purpose and suitability before assessing its financial costs. These costs are then used to appraise the funding that would be available on an annual basis, should the EWL not proceed. Using conservative estimates, we present an alternative strategy comprising investment in bus services in middle and outer suburban Melbourne, which has strong potential for rapid short-term roll-out. We conclude with discussion of reform to public transport agencies in Melbourne to improve service planning and delivery.

We note that our analysis has been made more difficult by the lack of transparency accompanying EWL decision-making, a point noted by a number of commentators including the Auditor-General (VAGO, 2014b). As public scholars and citizens we lament the failures of government policy process and transparent public deliberation represented by the East West Link.

Our assessment concludes that:

- The so called 'East West Link' tunnel has been misrepresented as a new road link between the growth areas of the Western suburbs and the employment areas in inner and eastern Melbourne. A real link will not exist until the western section is completed.

Tunnel Vision or World Class Public Transport?

- The East West Link is of doubtful economic value in terms of benefits achieved by the project relative to costs. The road will, over time, cost taxpayers between 13.6 and 15.6 billion dollars.
- Cancelling the East West Link (eastern section)– our preference – would release, in annual funding, over \$20m in 2015/16 rising to \$77 million by 2018/19 and over \$320 million by 2020/21 for use on alternative transport schemes.
- Interest savings of \$77 million could deliver over 18 million additional bus-kilometres or approximately 770 route-kilometres of bus services at current *SmartBus* frequencies, effectively *tripling* the *SmartBus* network.
- Suburban public transport improvements, particularly new bus networks accompanied by improved network coordination, can be quickly rolled out without major infrastructure investment.
- Further reform of the governance, planning and delivery arrangements for public transport is needed to improve both efficiency and service quality by coordinating Melbourne’s public transport into a single seamless multi-modal metropolitan network.
- If our proposed strategy were adopted, it is feasible that the foundations for a world class public transport system could to a large extent be established within a four year parliamentary term.

2 Background on the East West Link

The Project

An East West motorway link was first mooted by the Kennett government in the 1990s. In 2008 the concept was recommended by the East West Link Needs Assessment (EWLNA) study conducted by Sir Rod Eddington (2008). This ‘link’ is an eighteen kilometre motorway running from the Eastern Freeway to the Western Ring Road. Eddington also proposed that planning work should simultaneously commence on a 17 km Melbourne Metro rail tunnel linking Melbourne’s western and south-eastern suburbs. It is understood that despite the EWLNA recommendation, Eddington himself never considered the road tunnel to be a very high priority.

The eastern section of the currently proposed East-West link road, now under dispute, is a new 6.6 km motorway connecting the Eastern Freeway with City Link (a private owned toll road). The section incorporates a 4.4 km tunnel under the Melbourne Cemetery and Royal Park.

In itself this eastern section does not fulfil the Eddington recommendation for a link from the growth areas of the West across the Yarra to the employment areas in the central, northern and eastern suburbs. It will not be an East-West link as such. There will be no link until the western section is completed, but that is

many years away. Under current plans, construction will not begin until December 2015 and there is much that will need to be done between now and then if it is to start on time. The route and design for this section have not been settled and it is difficult to see how a link from the West to the western portal of the current proposal would work effectively. Put slightly differently, while the eastern section is projected to be open by 2019/2020 (or roughly mid-way through the *next* term of Parliament), the completion date of the western section has not been announced, nor can any reasonable estimate be made of when this is likely to occur.

Formal appraisal of the EWL

Despite all this uncertainty, last financial year the Commonwealth government paid Victoria \$1.5b toward the cost of building the EWL. Of this, \$1b is for the yet to be finalised western section (see Table 1). It has done this even though Infrastructure Australia, the Commonwealth's principal infrastructure agency, has acknowledged that it has yet to receive the full EWL business case from the Victorian government (Senate Estimates 2014a, 2014b).

Table 1: Commonwealth government payments to Victoria for the East West Link, 2013/14-2018/19

| East West Link | 2013-14 \$m | 2014-15 \$m | 2015-16 \$m | 2016-17 \$m | 2017-18 \$m | 2018-19 \$m |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Eastern section | 500.0 | 100.0 | 300.0 | 600.0 | 0.0 | 0.0 |
| Western section | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.0 | 500.0 |
| TOTAL | 1,500.0 | 100.0 | 300.0 | 600.0 | 0.0 | 500.0 |

Source: Senate Budget Estimates (2014a)

The explanation for this Federal payment prior to the assessment by Federal government of the business case for the EWL was recently provided by Josh Gordon (*The Age*, October 30th 2014). He reports that the decision reflects an election commitment provided by the Prime Minister while Leader of the Opposition “..agreeing to give Victoria \$1.5 billion of Commonwealth money if he won, provided the eastern section was prioritised over the western section”.

EWL Traffic Performance

The traffic assessments for the East West Link suggest limited demand for this level of road service. For example, traffic on the Eastern Freeway, which is the main eastern feeder to the EWL, is projected to increase by no more than 10 percent between 2011 and 2031 (GHD 2013, p. 61, table 22). This is likely because of limited anticipated land-use intensification in the Eastern Freeway corridor that might generate new travel demand.

Low projected Eastern Freeway traffic growth would produce a volume/capacity ratio of between 1.0 and 1.1, which could easily be mitigated through travel demand management and public transport interventions. Even constrained current routes are projected to see little future demand growth. Traffic on Elliot Avenue and Alexandra Parade which are the main current direct connections

between the Eastern Freeway and City Link, is projected to grow by no more than 10 per cent by 2031 (GHD 2013, p. 61, table 22). For Elliot Avenue, this equates to just 44,000 vehicles per day by 2031, much less than the total EWL projected traffic volumes of 100,000-120,000 vehicles per day, and also well below the capacity for Elliot Ave.

The main traffic growth issues projected by 2031 are not along the route of the East West Link, such as Alexandra Parade or Elliot Avenue, but on the north-south roads that currently serve the City Link entry and exit points. Thus traffic is projected to grow by 30-40 per cent over 2011 levels on Boundary Road and by 35-45 per cent by 2031 on Footscray Road (GHD 2013, p. 61, table 22). But as the Elliot Avenue projections indicate, a negligible proportion of this traffic will travel east. Simply put, the East West Link is a project for which there is weak east-west travel demand. In practical effect it is more likely to serve as an additional traffic feeder to Melbourne's CBD from the north-west and north-east.

In addition the East West Link will produce minimal travel time savings for motorists in Melbourne overall. The total projected time saving of 4,300 vehicle hours travelled per day in Melbourne by 2031 arising from construction of the East West Link will be captured by the very small proportion of Melbourne's road users, and even fewer users of other modes (GHD 2013, p. 26).

This discussion is based on the assumption that the forecasted traffic volumes for the 'base' and 'with East West Link' cases are founded on valid methods. However, it is not possible to verify this because of the decision by the Linking Melbourne Authority to recruit a traffic forecasting firm which uses a proprietary traffic forecasting model that is not open to public scrutiny.

The lack of transparency around traffic modelling is particularly concerning as it has become common for traffic volumes for toll roads to suffer from an "optimism bias". Black's (2014, p. 5, table 1) compilation of data from eight recent toll roads found that the ratio of actual to projected traffic was at best 0.82, with a median of 0.48. A draft *Infrastructure Australia* report (Juturna 2014, p.4) released earlier this year described Australian road spending as 'not rational'.

There is an extensive literature on the reasons why project proponents overestimate traffic use on toll roads. Flyvbjerg (2006; 2007), perhaps the leading expert on this problem, attributes error to three factors. The first, technical incompetence, is relatively rare, in contrast to the second key factor of 'optimism bias' in which proponents' desire for favourable figures influences how traffic modellers undertake their assessments. Lastly, Flyvbjerg identifies 'strategic misrepresentation' as a major factor in traffic overestimation. The unusually closed nature of the East West Link assessment process means that none of these miscalculation and risk factors can be ruled out as influencing this project. Indeed recent reports from *Infrastructure Australia* have raised concerns that traffic volume assessment of public infrastructure in Australia is deficient in terms of many of these factors (DIT 2011).

3 Financial Problems with the East West Link

Costs and Benefits

The conclusions of an economic cost benefit analysis conducted for the full road tunnel by Meyrick and Associates (2008) were very clear. The costs of the road tunnel were assessed then at \$7.1 billion (now estimated at \$6.8b) and the benefits in time saved on the trips into and across town are projected to be \$3.2 billion, giving a benefit-cost ratio of 0.45. In other words the costs of construction heavily outweigh the benefits in aggregate time savings. There are other 'systemic' benefits which Meyrick adds into the equation but they are relatively small and still only increase the benefit-cost ratio of the road tunnel to 0.73. The Meyrick figure for the construction cost of the road tunnel differs from that in the main EWLNA Report which includes all the necessary ancillary road works – \$9.5 billion. If we take this latter figure as the total cost, then the benefit-cost ratio (from time assumed to be saved) drops to 0.34.

The Victorian government argues that the benefit cost ratio is closer to 1.4 and has released a short business case to support this claim. The details of the calculations, however, have not been made public. The media have reported that the government's unpublished business case also provides an alternative estimate, showing a benefit-cost ratio of 0.8 when "wider economic benefits are not included" (Josh Gordon, *SMH*, Feb 13th 2014). Because the details of this modelling have not been released for public scrutiny it is impossible to be sure what the final benefit-cost ratio is.

Financials

The current conservative construction cost estimate of the eastern section of the East West Link is estimated at \$6.8 billion. Of this, \$3.5 billion is to be contributed by the Victorian and Commonwealth governments. Victoria is to contribute \$2 billion (Alison Savage, *The Age* 30th Sept. 2014), with the Commonwealth providing the balance over the period 2013-14 to 2016-17 as 'pre-payments' funded from projected increases in fuel excise. The first tranche of \$500 million (as well as \$1 billion of funding toward the western link) was paid to the State of Victoria last financial year (Senate Budget Estimates 2014).

The balance of the \$6.8 billion capital cost of \$3.3 billion is to be provided by the selected private sector partner. This is to be repaid by the Victorian government as quarterly 'availability fees' to the private partner over the twenty five year legal agreement commencing, we assume, in fiscal year 2019-2020 when the toll road is projected to start operating.

The total bill

Tunnel Vision or World Class Public Transport?

Projecting inflation at 2.5 per cent per year, and assuming an annual return on investment of 9.5 per cent¹ to the private sector partner, these availability fees will total \$12.7 billion in current dollar terms². If estimated annual re-payments by the Victorian Government for operating and maintenance costs incurred by the private sector partner of \$25 million are included, the total current dollar figure cost increases to \$13.6 billion.

Finally, if we add the Victorian government's budgeted investment of \$2 billion to the EWL eastern section over the fiscal years ending 30 June 2016 to 2019, the total future value of the eastern section alone ranges from \$14.7 billion to \$15.6 billion. This compares to the estimated \$18 billion of payments that are to be made to the operators of the Desalination Plant over its 28 year lifetime, assuming it never gets turned on, and \$24b if it does (*The Age*, December 12, 2011).

These estimates exclude the costs of the Commonwealth's \$1.5b capital contribution, which will be funded one way or another by Australian tax payers. Excluding the Commonwealth's contribution, we can convert these 'future' dollar amounts to net present values to give a better idea of the real cost of the project to Victoria. Depending on the discount rate used, the Victorian government is investing \$6.9 billion (at 7 per cent), \$5.4 billion (9.5 per cent) or \$5 billion (11.3 per cent) into this single large piece of road infrastructure.

Tolls and risks

The EWL toll revenues will be collected by the Victorian government rather than the private sector partner. Using the only publically available traffic forecast of 100-120k vehicles/day for patronage on the eastern section of EWL over the years 2020 to 2031 (GHD 2013), and then projecting to 2045 based on population growth estimates of 1.9 per cent, our analysis concludes that a one way trip toll would have to be no lower than \$13.31 in 2021 in order to *fully* cover the availability charge payments that would be paid to the private operator as well as pay for the interest on government debt based on a conservative interest rate on government borrowings of 3.85%.

If the toll were set at \$5.67 in 2021 and rose in line with expected inflation of two point five per cent per annum, a financial short fall of close to \$6.3 billion to the end of fiscal year 2045 would result (Table 2 below). This toll is estimated from the current City Link account toll, for customers 'with an account' from Exhibition Street extension to the end of the Burnley tunnel, of \$4.89. If the toll were lower at say \$3.59 in 2021, and rising in line with inflation the deficit would rise to \$9.0 billion; if the toll were \$7.69 in 2021 and inflation adjusted after that the deficit would be \$3.3 billion.

Table 2: Projected government losses for Eastern section of EWL based on 2021 EWL toll rates

¹ Based on 10 year government bond rate of 3.5 per cent, plus 6 per cent premium.

² Based on \$3.3b capital plus \$9.4b interest.

Tunnel Vision or World Class Public Transport?

| Toll rate in 2021 | Estimated annual financial loss (\$million) | Estimated total loss 2016-2045 (\$million) |
|--------------------------|--|---|
| \$13.31 | Nil | Nil |
| \$7.69 | \$184.5 | \$3,338.3 |
| \$5.67 | \$250.7 | \$6,344.8 |
| \$3.59 | \$319.2 | \$9008.6 |

Very large, capital intensive and long lived transport assets bring with them risks and uncertainties. Previously when governments built, financed and operated large transport infrastructure projects the risks were retained by the state. Public private partnerships like EWL were originally touted as a way of sharing the risks. In the case of the EWL, however, there is no risk sharing when it comes to patronage, for the state has agreed to shoulder all of it. The Government will set the tolls, collect them and pay them to the private operator with the difference between what is collected and what is owed as an availability charge being picked up by the tax payer directly. Most disturbingly, if tolls are set at \$5.67 per trip the average annual deficit between total toll revenue and availability liability is estimated at \$251 million. Given that traffic overestimation in Australian toll-road projects has been identified as a major policy problem by the Federal Government (DIT 2011), it is possible that the actual cost to the Victorian Government budget due to toll revenue shortfalls will be much higher.

4 Funding availability without the East West Link

The figures on the capital cost of the eastern section of the East West Link can be used to calculate savings from cancelling the project. These are shown in Table 3 (below). They come from two main sources: the first is the interest payment savings arising from the State either not borrowing the proposed \$2b for its contribution to the EWL or alternatively by repaying an equivalent in existing debt from the funds not used for EWL. These interest savings start at \$21.6m in 2015/16, and rise to \$77m in 2018/9 at which point they stabilise. The Government could also save by not having to make availability payments to the private operator. We estimate these savings to be \$179m in 2019/20, rising to \$360m the year after, and reaching over \$500m by 2033/34. Note that these savings are conservative as they exclude maintenance and operating costs we estimate to be \$25m per annum.

Table 3: Estimated interest paid* on government capital contribution to EWL eastern section and availability payments, 2015/16-2044/5.

| Fiscal year | Estimated interest payments ⁺ \$000s | Estimated availability payment [†] \$000s | Estimated total government payments \$000s |
|-------------|--|---|---|
| 2016 | \$21,560 | \$0 | \$21,560 |
| 2017 | \$43,120 | \$0 | \$43,120 |
| 2018 | \$64,680 | \$0 | \$64,680 |
| 2019 | \$77,000 | \$0 | \$77,000 |
| 2020 | \$77,000 | \$179,041 | \$256,041 |
| 2021 | \$77,000 | \$360,006 | \$437,006 |
| 2022 | \$77,000 | \$376,209 | \$453,209 |
| 2023 | \$77,000 | \$385,614 | \$462,614 |
| 2024 | \$77,000 | \$395,255 | \$472,255 |
| 2025 | \$77,000 | \$405,136 | \$482,136 |
| 2026 | \$77,000 | \$415,265 | \$492,265 |
| 2027 | \$77,000 | \$425,646 | \$502,646 |
| 2028 | \$77,000 | \$436,287 | \$513,287 |
| 2029 | \$77,000 | \$447,195 | \$524,195 |
| 2030 | \$77,000 | \$458,374 | \$535,374 |
| 2031 | \$77,000 | \$469,834 | \$546,834 |
| 2032 | \$77,000 | \$481,580 | \$558,580 |
| 2033 | \$77,000 | \$493,619 | \$570,619 |
| 2034 | \$77,000 | \$505,960 | \$582,960 |
| 2035 | \$77,000 | \$518,609 | \$595,609 |
| 2036 | \$77,000 | \$531,574 | \$608,574 |
| 2037 | \$77,000 | \$544,863 | \$621,863 |
| 2038 | \$77,000 | \$558,485 | \$635,485 |
| 2039 | \$77,000 | \$572,447 | \$649,447 |
| 2040 | \$77,000 | \$586,758 | \$663,758 |
| 2041 | \$77,000 | \$601,427 | \$678,427 |
| 2042 | \$77,000 | \$616,463 | \$693,463 |
| 2043 | \$77,000 | \$631,874 | \$708,874 |
| 2044 | \$77,000 | \$647,671 | \$724,671 |
| 2045 | \$77,000 | \$663,863 | \$740,863 |

* Calculation based on government borrowing of capital input for 30 years at 3.85% pa.

† Calculation based on capital cost annualised and adjusted for inflation of 2.5% pa.

*All figures 2014 \$.

It could be argued that these estimated savings are overstated because they do not take into account the revenue raised from proposed tolls and which could be used to offset at least part of the availability payments. We argue that user charges could be levied on alternative transport options also, so it is appropriate not to take them into account when estimating the government funding that could be available for other spending options. In addition, as we pointed out earlier, it is likely that there will be a significant gap between toll revenues and the availability charges paid to the private operator, which in the EWL's first full

year of operation we estimate to be equivalent to a loss of between \$185m and \$254m per year depending on the toll rate that is set.

Put slightly differently and using conservative assumptions, we estimate that were the EWL not to be proceeded with, the Victorian government would have large sums available to fund alternative transport options, with \$21m freed up in 2015/16, \$43m the year after, \$65m the year after that, peaking at \$77m in 2018/19. By the time the toll road was fully operational in 2020/21 the Government would have more than \$437m per year available for other purposes.

5 An Alternative Transport Strategy

Research evidence shows that cities which build their transport systems around public transport find that transport costs are less of a drain on the regional economy than those that put the car at the centre of their transport plans (Chatman and Noland 2014). International experience also shows that the key to effective and efficient public transport is to organise services into networks and integrate the transport plan with a city development plan that limits urban sprawl and reduces the need for travel (Neilsen et al 2005; Ewing and Cervero 2010).

Melbourne has extensive public transport infrastructure, but much of it is used inefficiently or ineffectively. Service reliability is poor and for the most part coordination between modes is either non-existent or ineffective (VAGO 2014a). While some strategic investments will be required for asset renewal or upgrading, many of the problems have nothing to do with infrastructure – they are consequences of the government’s planning and governance arrangements.

We agree with the Victorian Auditor General that unless we improve the way our institutions are designed, focused, coordinated and resourced to plan and deliver public transport we will continue to make poor decisions about future transport plans and investment. Moreover the effectiveness of our capital spending on transport will be sub-optimal without improvements to wider network efficiency. Put another way, there are efficiencies to be gleaned from our existing transport networks through ‘soft’ measures like coordination and integration of modes which can boost service effectiveness without large sums of capital expenditure.

Buses to fill network gaps

By linking trains, trams and buses effectively and making transfers easy, paths to many more origins and destinations can be connected, improving the efficiency and productivity of the various modes. The bus networks are central to this improvement by providing links between tram and rail lines and non-rail based major land-uses. In much of metropolitan Melbourne, buses are the only currently available mode of public transport.

Research and anecdotal evidence suggests extensive unmet demand for improved bus services, particularly in outer and fringe suburban areas beyond rail and tram infrastructure. Bus services have been estimated to have a benefit-cost ratio of 3.5 (Stanley 2010) and thus offer very good value for money, especially relative to toll roads. Although buses require some simple infrastructure such as bus stops and platforms, signage and signalling, this is a much lower cost per kilometre of service than for rail or trams. Buses can be rolled out very quickly enabling service upgrades within short time frames. High quality bus services can also test route and corridor patronage for future rail investment.

Melbourne's bus networks need a comprehensive redesign and investment to:

- Speed up current bus services by means of route and timetable redesign
- Use new bus capacity to fill service gaps and improve frequencies
- Provide road priority for buses for faster travel times
- Link buses with trains, trams and local activity centres via route redesign and timetable coordination

Current metropolitan bus services deliver 114.8 million bus-kilometres (State of Victoria 2014). Although costs vary among operators, a reasonable estimate for bus service costs, including drivers, fuel, maintenance and depreciation, is \$4 per kilometre of operation. This is verified by the current service frequencies and hours of coverage of the *'SmartBus'* services which cover 370 route-kilometres and require 9.2 million bus-kilometres at a cost of around \$37 million p.a.

An increased expenditure on bus operations of \$77 million p.a. could deliver 19.2 million additional bus-kilometres or approximately 770 additional route-kilometres of bus services at current *SmartBus* frequencies. This would effectively *triple* the current *SmartBus* network. These services could be designed to better link between *SmartBuses*, normal buses, rail and tram routes and services. This would deliver large improvements in key suburban corridors at modest cost.

Supply of services to areas of high transport disadvantage was the key objective of 2006-2010 increases in bus supply. This however was appropriately focused on targeting scarce resources to areas of high need and poor existing service. The logical next step in this necessary improvement is to further improve services, particularly through improved network design and connectivity. Some of this important work has begun via the Wyndham Bus review and elsewhere. Sustained planning effort is needed to ensure that additional investment in service supply improves both network efficiency and social effectiveness.

The expenditure of \$77 million per year of East West Link interest savings is of course insufficient to resolve all of Melbourne's transport problems. Wider improvements beyond this spending are required. Given that the gap between likely EWL toll revenues and availability payments to the private operator are likely to be in the order of \$251 million per annum, it is reasonable that a figure greater than \$77 million per year on average might be available for public

Tunnel Vision or World Class Public Transport?

transport. Although we are of the view that suburban buses ought to be the priority and delivered as described above, greater funding availability would enable wider system improvements and reforms.

Rail tracks and signals

The rail and tram track and signal systems face problems of ensuring adequate preventative maintenance and this is reflected in the high level of breakdowns, particularly on the rail system. In its current state the rail system is already under stress, and prone to breakdown under normal conditions, such as rainy weather. The problems are systemic and need to be addressed urgently to provide a sound basis for future rail and tram investment and capacity expansion.

Further investment is required to improve tram and rail networks:

- Upgrade rail signalling systems for reliability and capacity upgrades
- Address the systemic inefficiencies in our rail network scheduling and timetabling
- Support rail through improved bus network coordination
- Provide road priority so trams run quickly and reliably

If comprehensively applied this approach could provide a seamless public transport service that enables people to make connections between trains, trams and buses with minimal waiting time. Buses are the glue that would link the whole system together.

If this vision and strategy were adopted and formed the basis of a long term commitment by government it is feasible that the foundations for a world class public transport system could, to a large extent, be established within a four year parliamentary term. This would result in significant service improvements and increased patronage throughout the whole system. It would both relieve road traffic congestion and return better value for money through increased numbers of trips per service kilometre. Successful implementation would give government the confidence to continue the rebuilding strategy in the following parliamentary terms.

Public transport governance

New investment in public transport risks being used inefficiently in the absence of major reform to the way that public transport services are planned, procured and delivered in Melbourne, across all modes. The *Transport Integration Act 2010* (s. 12) states:

The transport system should – facilitate integrated and seamless travel within and between different modes of transport.

It is important now to implement the intention of this Act. Although encouraging steps towards real reform have occurred in recent years, decision-making about services and operations remains distributed across multiple planning and infrastructure agencies and operators (VAGO 2014a).

There remains a need to comprehensively plan and coordinate all modes into a single seamless metropolitan network. As the Victorian Auditor General has noted, the current coordinating arrangements via the Transport Planning Group committee of transport agency representatives is not adequate to this task (VAGO 2014a). Reform would require further improvement to institutional arrangements so that the network design, coordination and planning function is given priority in public transport decision-making. This network design and coordination role would then direct service procurement and infrastructure selection. Further coordination between the lead public transport agency and the Metropolitan Planning Authority should be investigated.

As part of future investment in transport for Melbourne a proportion of transport spending needs to be allocated to reform Melbourne's public transport governance arrangements and to commence the process of reorganising the bus, rail and tram networks to operate as a seamless integrated system. This would likely require a dedicated team with executive authority to undertake these tasks. The team should be led by and comprised of experts with demonstrated ability to plan and reform high performance and high efficiency public transport networks as for example, in Zurich, Munich, Vienna (see VAGO 2014a) or Vancouver. Such a body would not be expensive to establish and run, costing no more than \$5m per annum. The authors expect to offer further guidance on this topic in future.

6 Summary and conclusions

The Victorian Government's determination to proceed with the EWL is difficult to understand. Opinion polls show that the EWL is a relatively unpopular policy option. Recent surveys indicate that only a minority of Victorians wish it to proceed, and the majority would prefer cheaper alternatives like removing railway crossings on busy roads (see for example *The Age*, March 2, 2014; *The Herald Sun*, August 18, 2014; October 27, 2014).

It is an unpopular option that brings with it great financial cost. We have demonstrated that the interest costs alone from the Victorian government's capital contribution will reach \$77 million per year in 3 years time. It is likely that this cost will grow to over \$250m per annum by the time the EWL is projected to open, taking into account toll revenues and almost \$450m if we exclude them.

These funds could be used for more effective transport options. We have shown for example that \$77m would enable a tripling of the *SmartBus* network to improve suburban public transport network links. This could markedly improve

transport services in poorly served areas, especially if paired with reform of governance arrangements such as recommended by the Auditor General.

In addition to the poor financial outlook of the East West Link and the alternative ways the funds could be used to improve Melbourne's transport, we are also dismayed at the public policy process that has been followed with the East West Link. This includes the opaque nature of the project contracts with the private consortium, the timing of the project decisions relative to the 2014 election and side commitments that appear designed to circumvent future judicial determinations regarding the validity of the EWL planning process (for latter see Victorian Government 2014, p. 71).

We can conclude that Victoria is at a critical moment in its transport planning. Victoria's transport policy has been politicized and become captive to an unnecessary and expensive project where the political risks have been maximised, the financial risks to the private operators minimised, at the expense of transport funding, the lion's share of which will be locked up for multiple terms of government.

The cancellation of the East West Link may involve some short term costs, but it also frees funds for more significant and appropriate transport improvements, particularly to upgrade, coordinate and integrate suburban bus networks, as well as improving rail performance and further advance transport planning governance reform. Unlike the EWL, these improvements will begin to be felt immediately and will progressively ramp up as more funding becomes available. More than anything else it will require the will to replace tunnel vision with better public transport.

7 References

- Black, J. (2014) 'Traffic risk in the Australian toll road sector', *Public Infrastructure Bulletin*, 1(9), pp. 1-12.
- Bureau of Infrastructure Transport and Regional Economics. *Review of Traffic Forecasting Performance Toll Roads*. Canberra, Department of Infrastructure and Transport, 2011.
- Bus Association of Victoria 2013, *Melbourne, let's talk about the future: Discussion Paper Submission*, BAV, Melbourne.
- Chatman, D. G. and R. B. Noland (2011). "Do Public Transport Improvements Increase Agglomeration Economies? A Review of Literature and an Agenda for Research." *Transport Reviews* **31**(6): 725-742.
- Department of Infrastructure and Transport (2011) *Review of traffic forecasting performance of toll roads*, Canberra, DIT.
- Ewing, R., & Certero, R. (2010). "Travel and the Built Environment". *Journal of the American Planning Association*, 76(3), 265-294.
- Eddington, R. (2008) *East West Link Needs Assessment final report*. Melbourne, Department of Infrastructure.
- Flyvbjerg, B. (2007) "Policy and planning for large-infrastructure projects: problems, causes, cures." *Environment and Planning B*, 34, pp. 578-597.
- Flyvbjerg, B., Holm, M. K. S. and Buhl, S. L. (2006) "Inaccuracy in Traffic Forecasts." *Transport Reviews*, 26(1), pp. 1-24.

Tunnel Vision or World Class Public Transport?

- GHD (2013) *East West Link – Eastern Section Traffic Impact Assessment*, Melbourne, Linking Melbourne Authority.
- Juturna Consulting (2014) *Spend more, waste more. Australia's roads in 2014: moving beyond gambling*, Draft consultation report for Infrastructure Australia; Canberra, Department of Infrastructure and Transport.
- Meyrick and Associates (2008). *East West Needs Assessment Economic Benefits and Costs Analysis – Technical Report*. Melbourne, East West Needs Assessment Team, Victorian Government.
- Nielsen, G., J. Nelson, C. Mulley, G. Tegner, G. Lind and T. Lange (2005). *Public Transport - Planning the Networks - HiTrans Best Practice Guide 2*. Stavanger, Norway, European Union Interreg III and HiTrans.
- Senate Budget Estimates (2014a) Rural & Regional Affairs and Transport Legislation Committee, 26-27 May, Answers to Questions on Notice on Infrastructure and Regional Development, Question 136.
- Senate Budget Estimates (2014b) Rural & Regional Affairs and Transport Legislation Committee, 20-21 October.
- Stanley, J. (2010). *The Value of Melbourne's Route Bus Services*. Melbourne, Bus Association of Victoria.
- State of Victoria, *Victorian Budget 2014-15, Service Delivery*, Budget Paper No. 3, p. 247.
- VAGO (2014a), *Coordinating Public Transport*, Victorian Government Printer, Melbourne.
- VAGO (2014b), *Impact of Increased Scrutiny of High Value, High Risk Projects*, Victorian Government Printer, Melbourne.
- Victorian Government (2014) *Securing Victoria's Future. Economic and Financial Update*, Victorian Treasury, Melbourne.