CONNECTING TO THE FUTURE

The Alternative to the Victorian Transport Plan

PTUA

PUBLIC TRANSPORT USERS ASSOCIATION

Contents

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1 Introduction

It's 8pm on a fine summer evening in 2020. Across the city, people are on the move. Thousands of families are pouring out of a free concert at the Myer Music Bowl: some eighty thousand are converging on the MCG for the sporting event of the week, back-to-back 10-10 night cricket matches. Melbourne's streets are alive with people on their way to cafés, cinemas, restaurants, pubs, clubs and concerts.

It hasn't been long since all this activity would have seen the streets choked with cars, as people joined interminable traffic jams and cruised aimlessly for parking spaces. Certainly there are still plenty of cars cruising the streets, but mostly at a steady 40kph and encountering little congestion. Many would hesitate to give a reason for this lack of congestion: after all, petrol prices had retreated from their record of $4.20 a litre set in 2017 and were now at a much more reasonable (for 2020) $3.50 a litre or so. When pressed, people would say they were using public transport rather more than previously, no doubt, but wouldn't attach a great deal of significance to this fact—after all, it's not as though they'd made any heroic personal sacrifices. It just seems so much more convenient to use the train or the bus these days.

Though the evening peak has gradually subsided, Flinders Street Station is still a hive of activity. A time traveller from the early years of the 21st century may have thought the Commonwealth Games had returned to Melbourne, but this is just the regular pattern now. Even at 8 o'clock, there are one or two trains passing through Flinders Street every minute: and they don't linger, they just arrive, let one bunch of passengers off and another bunch on, and are off again within 60 seconds. It helps that there are staff on every platform, cautioning people to stand back from approaching trains, ensuring everyone stands back to let people off, and assisting people with disabilities or heavy luggage. People react cheerfully to this staff presence, commenting to each other on how 'European' the station feels now.

The trains themselves are operated by RailVic, a private consortium owned by industry superannuation funds, with a management team recruited from the Swiss Federal Railways, and some engineers seconded from Perth. Metro Tram Company, an operation jointly owned by ten inner Melbourne councils, operates the tram network. Most buses in Melbourne are operated by GVK Transit, created in 2015 from a merger between GrendaVentura Ltd and Kefford Corporation, though a few routes remain in the hands of smaller operators.

But the details of who owns what aren't foremost in people's minds, because all trains, trams and buses (as well as the Bay ferries and the Yarra punt) are now part of one network, planned and managed by Transport for Melbourne. Its distinctive livery and stylised 'M' monogram is prominent on all public transport vehicles and signage: in fact it's hard to find anywhere in Melbourne these days where one can't spot the little 'M' pointing the way to the nearest public transport service. Only the colour changes: blue for a train, green for a tram and orange for a bus, a scheme Transport for Melbourne had retained from earlier times.

Minister for Transport Shane Wakelin is on his own way home, after observing a monthly meeting of Transport for Melbourne. At this meeting, management voted to undertake a feasibility study into extending the East Doncaster train line to Ringwood, after considering preliminary figures. A formal proposal from Maribyrnong City Council for a new tram line in Footscray was also tabled at the meeting, and the other attendees in the public gallery were debating its merits as they left the meeting. Shane himself privately favoured the proposal, but direct political intervention in public transport planning is frowned upon these days. Nonetheless, he'd scheduled a meeting with Parliamentary Secretary Neil Roberts to discuss it further.

While Shane boards the train for the quick 10-minute trip to Victoria Park, Transport for Melbourne CEO Alannah Newman is also on the way home. A resident of outer-suburban Berwick since moving to Melbourne from Toronto, Canada back in 2010, she has seen the evening train frequency improve from two trains an hour to one train every 10 minutes. She hasn't had to pick and choose which train to catch, either, since every train is met at Berwick by the local bus that takes her the last 3km to the street where she lives. It's a standard of service she had been used to in Toronto before coming to Melbourne, but it seems many of the three dozen people that get on her 8:50pm bus at Berwick still find it rather a novelty.

Back in 2009, such a transport renaissance in Melbourne and Victoria seemed like pure fantasy. The State Government at the time still viewed public transport as an intractable problem, and was more interested in chasing outdated 1960s solutions to transport problems. The Minister for Public Transport was on record saying she didn't want to run a public transport system. Trains were desperately overcrowded in peak hour and almost empty at other times. The government had just released its fourth transport plan in eight years, big on unaffordable construction projects but almost silent on how this would really help travellers. There seemed to be no-one in government prepared to take leadership and bring about positive change.

When change did come it was unexpected. Mass public discontent with the state of transport had led in 2008 to the election or re-election of people with strong sustainable transport credentials to Victoria's local councils. These councillors, together with community activists and some State MPs, banded together in various municipal forums and town-hall meetings and put pressure on the State and Federal Governments to act, putting forward an agenda for change that had enthusiastic public support. The campaign began small, but gathered momentum later in 2009 as disaffection with poor train and tram services mounted. The government's defence of the status quo became a political liability, forcing it to abandon its re-privatisation of Melbourne's trains and trams and hold an inquiry into future management arrangements for public transport. By the time of the next State elections in 2010, the major political parties were engaged in a bidding war on big changes to transport policy.

Some of the activists who had driven the process were elected to Parliament in 2010, and the government's first action after the election was the creation of Transport for Melbourne, and the transfer to it of the existing public transport budget. By 2012 there were nearly twice as many trains running as in 2009, and 60% more in peak hour, a feat that planners in 2009 had insisted was impossible. Better fleet planning and maintenance turned cancellations into a rarity, for which passengers were always compensated. By 2015 four new rail extensions were operating; and one year later mode share for public transport passed 20% of motorised trips, four years ahead of the government's target.

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This, at least, is one plausible scenario for the future of transport in Melbourne and Victoria. The PTUA has produced this document to explain how it is possible, why a change is needed, and what you can do to help bring it about.

We begin in Chapter 2 by looking more deeply at our current transport crisis. Chapter 3 explains the factors that have allowed the crisis to continue and grow—the distractions and blind alleys offered by vested interests and the failure of government to defend the public good. Chapter 4 provides the ingredients for a solution, and Chapter 5 applies this recipe to the most transport-deprived part of Melbourne, the western suburbs. Finally, Chapter 6 discusses how you can be part of this solution.

So let's begin where we are now: the bad news first.

2 Victoria's Transport Crisis

'Crisis' is not a word to be used lightly. But few of us would deny it's applicable to the current transport situation in Melbourne and Victoria. Our freeways and arterial roads suffer from chronic traffic congestion. Peak hour trains on almost all lines are overcrowded, to the point where some people have to stand on stations waiting for two trains to go by before there's one with room to board. And until the Global Financial Crisis hit, petrol prices had been pushing through $1.70 a litre, a level that was unthinkable a few short years ago but threatens to strike again once economic conditions improve.

Particularly in the outer suburbs and outside Melbourne, commuters are forced either to sit in congested traffic or to drive to a railway station where there may be nowhere to park and no room on the train anyway. Outside a handful of fortunate regional centres the country rail network is falling apart, with buses often replacing trains and the entire grain freight system under continual threat. And on long weekends it seems every country highway in Victoria is choked with car traffic as well.

Some of these problems, it turns out, are the direct result of bad planning decisions by the Bracks and Brumby State Governments. Others (such as petrol prices) are due to general trends for which no-one in particular is responsible; but even here, the resulting problems have been made worse through government inaction. And in almost every case, the 'solutions' being proposed by government planners and studies are likely to make things even worse, or at best waste vast sums of money just to stay where we are.

Meanwhile, factors such as climate change, the peaking in global oil supplies and the failure of decades of road-building to solve our traffic problems demand a new approach to our transport problems. Thanks to the way our expectations for action have been thwarted by successive State and Federal Governments, many of us have been led into a state of cynical despair, where we think it's impossible for any of these problems to be solved. Yet the solution is neither as difficult, nor as costly, nor as time-consuming as the government would have us believe.

Government planners and bureaucrats use a raft of urban myths and spin-doctoring to defend the status quo and deny there is an alternative; but the evidence from here and other places suggests otherwise. Let's look at some of the current problems more closely.

2.1 Responding to Traffic Congestion

Every city in the world has a traffic congestion problem. But in Melbourne, congestion has been getting noticeably worse over the last decade. What should be a simple trip from A to B is more of a chore than ever.

In the 1960s it was easy to argue that traffic congestion happened because there weren't enough roads. But as things are now, congestion has increased *despite* all the new roads we've built. CityLink opened in 2000; the Hallam Bypass in 2003; the Hume (Merri Creek) Freeway in 2005; a bigger Calder / Tullamarine Freeway interchange in 2007 and Eastlink in 2008; yet all that time it has become harder to drive around Melbourne, not easier.

The problem becomes even worse when compared with other Australian capital cities. Melbourne has always had more lane-kilometres of freeway per person than either Sydney or Brisbane, but in recent years travel speeds in Melbourne have declined at a faster rate than in Sydney or Brisbane.

So whatever the root cause of traffic congestion may be, it doesn't seem that a shortage of roads really has much to do with it. Nor has building more roads proved to be the answer. If we are to understand the causes of congestion better, we need to stop believing in contradictions—that although Melbourne's congestion has got worse, somehow adding even more freeways to the ones we've built will make it better instead—and look at what the evidence tells us.

Transport planners have had many decades to study the causes of congestion, and what they have to tell us is rather different to what we're used to hearing from those with a vested interest in more roads. The first inescapable fact is:

A future based primarily on cars is a future based on traffic congestion.

Experts and laypeople alike who have observed the build-up of congestion in all the world's cities in the last half-century, and the huge efforts all these cities have made to respond to it, have been all but forced to this conclusion.

Quite simply, in no city on Earth has the attempt to 'solve' traffic congestion with more roads resulted in anything but more traffic congestion. A few cities, such as Detroit, have reduced congestion in their central area by obliterating their city centres, at the expense of 'suburban gridlock' further out, where all the activity has gone. Others, like Houston, manage to keep their chronic congestion just below crisis level by building more and more roads every year.

> You might argue that Houston, Texas has [got congestion under control]. They throw about $1-billion a year into it, they do keep the traffic moving. Do people want to be like Houston? Can you be like Houston? Are you prepared to spend that amount of money and is that really the kind of city that you want in the end? And they have to run as fast as they can just to keep where they are.
>
> —Gordon Price (Transport planner, Vancouver, Canada), ABC radio interview, February 2007

A comprehensive survey of the world's cities, by planning experts Peter Newman and Jeff Kenworthy of Murdoch University in Perth[1], confirmed what was already known through anecdotes like these. The cities that have the worst traffic, the highest emissions and use the most petrol are the ones where private cars are the predominant mode of travel, and where alternatives such as public transport, walking and cycling are relegated to marginal roles. If there really were a way to solve congestion while keeping car use in its predominant role, at least one of these cities would have discovered it by now!

So there is a basic choice presented to us in an age of near-universal car ownership: to continue planning primarily for car travel and put up with the congestion that results, or to plan in a way that emphasises high-quality alternatives. Which brings us to the next key fact about congestion:

Congestion doesn't depend on the quality of the roads, so much as on the quality of the alternatives to car travel.

Many years ago, the economist Anthony Downs came to realise that the choices people have in their mode of travel affect their travel behaviour. Generally, travel time is the most decisive factor. If a journey is quicker by car than by public transport, people will tend to use the car, and if it's a *lot* quicker then an overwhelming number will prefer the car. Although this appears to just state the obvious, it has some surprising consequences.

[1] Newman, P. and Kenworthy, J. *Cities and Automobile Dependence: An International Sourcebook.* Gower Publishing, 1989.

What happens, for example, in situations where a road runs parallel to a train line, and both carry high volumes of traffic? If planners respond to the high traffic by widening the road, then passengers on the train will respond to the better road and switch to driving instead, and will do so until congestion reduces the travel time to what it was originally. The 'equilibrium' is restored, but with more people using cars and fewer using trains.

The effect is exactly the same if train travel suddenly becomes slower (due perhaps to declining reliability or service cuts). Again, passengers will switch to driving in order to reduce their travel time; and they will do so until the travel time by road drops to match that of the now-poorer train service.

But what happens if the train service improves, making train travel faster? Then the opposite occurs: drivers on the road switch to trains to reduce their travel time. This reduces congestion on the road, until the 'equilibrium' shifts to where road travel is as fast as the new, faster train service. This equilibrium is reached with more people on the train and fewer in cars.

The moral of all this was pointed out by J.M. Thomson in his 1977 book *Great Cities and Their Traffic*.[2] Traffic congestion, he observed, is determined not by the quality of the roads, but *by the quality of the alternatives to driving*. This is now recognized as a genuine effect by transport economists, who even have a name for it: 'the Downs–Thomson Paradox'.

Real-world examples of the paradox in action were documented by the late British transport planner Martin Mogridge in an extensive case study of London,[3] and a US study that compared travel times by car and transit on major urban corridors.[4] But examples can also be found all over Melbourne and Victoria. Witness how the widening of the Geelong Road in the 1990s has encouraged so much more traffic that it is now regularly more congested than before. Or how the opening of the Monash Freeway reduced patronage on the Glen Waverley line to the point where the number of peak-hour expresses has dropped from five in 1987, to one today. Or how despite record patronage on Melbourne trains, the share of trips made on public transport declined from 2006 to 2007, thanks in part to the poor reliability of peak-hour train services (as well as the non-availability of public transport more generally).

In order to be serious, any attempt to fight traffic congestion in Melbourne has to start with the alternatives: public transport, walking and cycling. By happy coincidence, these alternatives are also more environmentally friendly ways of getting around.

2.2 Victoria's Freeway Fetish: From CityLink to 'Missing Link'

Although there is now a 30-year-old global consensus among transport planners that road-building is an ineffective response to congestion, the news has taken a long time to reach Australia, and Melbourne in particular. Here, the loudest voices in transport policy come from a powerful road lobby whose influence has grown almost unchecked since the 1960s.

Having so far pushed through CityLink, Eastlink, extra lanes on the Monash Freeway and Western Ring Road, the Geelong Ring Road and the Pakenham Bypass—not to mention all those other new roads that have failed to reduce traffic congestion in Melbourne—the road lobby has its sights on new projects. These include a cross-city road tunnel, a ring road through the Yarra Valley, and even a freeway to dump more traffic in the rural and leisure-oriented Mornington Peninsula.

[2] J.M. Thomson. *Great Cities and Their Traffic*. Gollancz, 1977.
[3] M.J. Mogridge. *Travel in towns: jam yesterday, jam today, and jam tomorrow?* Macmillan, 1990.
[4] D. Lewis and F.L. Williams. *Policy and Planning as Public Choice: Mass Transit in the United States*. Ashgate, 1999.

New Plans in Old Clothes

As new as these freeway plans sound, they actually go back a long way. In the 1960s Melbourne's road planners, guided by American consultants, produced a plan to cut swathes through Melbourne's suburbs and spend billions of dollars to build a massive freeway network spanning some 500 kilometres.

The 1969 freeway plan, overlaid on a contemporary map of Melbourne[5]

Oddly enough, this radical freeway plan was presented as a 'balanced' response to transport needs by its proponents. In a Ministerial statement curiously reminiscent of today's freeway plans, it was claimed that

> [The study] has now produced a plan which recognises that there is a place for all forms of transport in attempting to solve the problem—in other words, it believes that balanced transport is the only hope.
>
> —Minister for Transport's Introduction, *Melbourne Transportation Study*, 1969

Yet a glance at the plan's costings gave the lie to any notion of balance: roads and car parking accounted for 86% of the budget, and sustainable transport for only 14%.

The *Melbourne Transportation Plan* drew intense criticism, both from local communities and international experts. Transport specialist J.M. Thomson, visiting Melbourne, called it

> an unconvincing work presented with all the glib political clichés that one has learned to distrust. It is based on the earlier American transportation study tech-

[5] *Melbourne Transportation Study*, 1969. Base map © Melway Publishing 2002. Reproduced with permission from Melway Street Directory, Edition 29.

> niques, by now thoroughly discredited…quite clearly it is a road plan, not—as it is called—a comprehensive transport plan.
>
> —J.M. Thomson[6]

Two months after the plan was released in 1969, the 'freeway revolt' began in the USA with the Governor of Massachusetts cancelling all of Boston's proposed inner-city freeways. Soon Australian governments were feeling the pressure: Victoria's Premier Hamer cancelled Melbourne's inner-city freeways while facing an election in 1973, and soon after, cancelled the proposed link between the existing South Eastern Freeway and the Mulgrave Freeway further out. Meanwhile the Federal Government was threatening to cut off funding for urban freeways altogether.

Melbourne's road lobby responded to the freeway revolt by continuing with its original plans in secret. An official history of Vicroads notes that after the South Eastern–Mulgrave freeway link was cancelled in 1973, the Country Roads Board (as it then was) continued to buy up properties along the supposedly abandoned route.[7] Official advice at the time was:

> Go quietly on freeway matters at the moment…these are frustrating times for us all, but the pendulum will swing our way again.
>
> —Private memo from Chairman of CRB, 1973[8]

As it turns out, that was not bad advice. Over the following decades, bureaucratic reorganisations under Cain, Kirner and then Kennett turned the CRB into the Road Construction Authority, and then Vicroads. Yet although other government agencies had their purposes and staffing changed as part of these reorganisations, somehow the road agency always managed to survive intact. Indeed, with every restructure the position of the road planners was strengthened. As press reports noted in 1983:

> The CRB is the only State transport agency to emerge from the new reorganisation intact and under its former director. It will actually be strengthened, since most of the planners seconded to the Ministry of Transport are from the CRB.
>
> —The Age, 26th April 1983[9]

As in 1983, so also in 1996, when the Kennett Government merged the Departments of Transport, Planning and Local Government into an omnibus Department of Infrastructure. As in 1983, senior managers in the new Department were recruited from Vicroads, which remained a separate agency with its own planning powers, reporting directly to the Minister.

Gradually, as the road lobby consolidated its bureaucratic power within government, all the old freeways from the 1969 plans were revived: initially by renaming them 'arterial roads', and later by appealing to the benefits for road freight. The South Eastern–Mulgrave link, which Hamer had cancelled in 1973, opened for traffic in 1988 and became a full grade-separated freeway in 1996. And with the approval of CityLink in 1991, even the inner-city freeways were back on the agenda.

The latest road proposals simply resuscitate more of these old plans from the *I Love Lucy* era. A glance at the 1969 map shows that the North East 'missing link' from Bulleen to Greensborough is a reincarnation of the F18, while the 'Frankston Bypass' is just the southern end of the F6. Even the daddy of them all, the Eddington East-West tunnel, is simply the original westward extension of the F19, given an up-to-date twist by merging with the old F12. As

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[6] *Great Cities and Their Traffic*, p.137.
[7] W.K. Anderson. *Roads For the People: a History of Victoria's Roads.* Vicroads, 1994.
[8] *Roads For the People*, p.248.
[9] Quoted in *Roads For the People*, p.258.

we'll see in Section 3.4, both the Victorian Transport Plan and the Eddington report it responds to bear a curious resemblance to their 1969 ancestor.

The history of freeway plans over the last 20 years amply reveals the road lobby's *modus operandi*. Every major new road, from CityLink in the early 1990s to the Scoresby Freeway (now Eastlink) in the late 1990s to the East-West tunnel and North East 'missing link' today, is sold to the public not merely as a new idea, but as *the* ultimate cure for Melbourne's traffic congestion. In reality plans for these roads have sat within Vicroads for decades, and as each new one gets built and doesn't cure congestion as advertised, the road planners are ready with the next freeway from their 1969 wish list. *This* one really will be the ultimate congestion cure, they say!

2.3 Climate Change and Transport

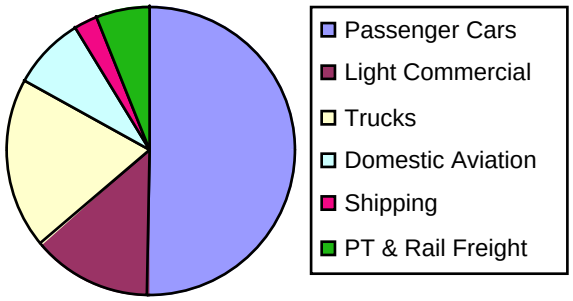
The obsession with new roads flies in the face of our biggest contemporary challenge. Transport is responsible for around one-sixth of Australia's emissions of greenhouse gases, or 80 million tonnes of CO_2 annually. The vast majority come from cars and trucks. (Trains, trams and buses account for about 6%, and domestic aviation and shipping for about 9%.[10]) If Australia's transport sector were a country, it would be one of the world's top 50 emitters.

The global imperative to reduce our greenhouse emissions is now well recognised. The 2007 report of the Intergovernmental Panel on Climate Change (IPCC) indicated a need to reduce emissions by 20% by 2020 and 80% by 2050 if we are to avoid the 2°C warming of the atmosphere considered to be the 'trigger point' for dangerous climate change.[11] Scientific observations since then suggest the IPCC's estimates are too conservative, with Arctic ice (for example) now vanishing decades earlier than in even the worst-case IPCC scenario. It is highly likely that a 90% or deeper cut may be required by 2050, or even earlier. But it is almost indisputable that we will need to act sooner rather than later—and earlier action will cost us much less in the long run. If we are to avoid dangerous climate change, then by all accounts we ought to start finding those cheap emissions cuts now, and act on them quickly.

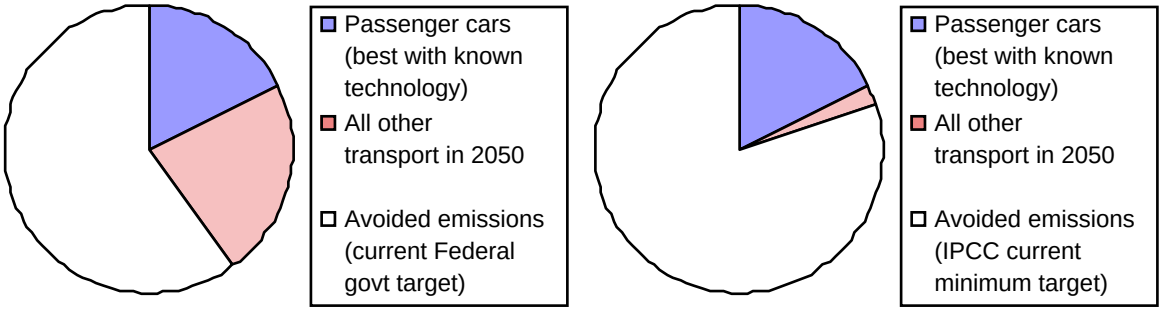
Even a 60% cut in transport emissions by 2050 (to 32 million tonnes) cannot occur without substantial change from the *status quo*. The car industry's most optimistic future scenario for emissions from more efficient vehicles (hybrid, diesel, electric or hydrogen) is 110 grams of CO_2 per kilometre, and the total distance travelled by all cars in Australia is currently some 155 billion kilometres. This means that even assuming no future growth in car travel, under 'business as usual' cars alone will still be contributing 17 million tonnes of CO_2 annually. Meanwhile trucks, planes, trains, buses and motorcycles between them would have to reduce their share of emissions to 15 million tonnes from around 40 million tonnes now—despite projections of a doubling in freight volumes before 2050!

Even this unlikely scenario is based on the most favourable assumptions about car efficiency. If the optimistic forecasts are not achieved, transport will struggle even to approach a 60% target if present-day rates of car use continue. (The Eddington Report and Victorian Transport Plan actually assume an *increase* in transport emissions in the next 20 years!) And if the required target is actually 80%, even the most fanciful future technology scenarios will not save us—*if* we assume the status quo for car use is maintained. It seems clear that the magnitude of reductions requires us to focus not only on technical improvements in efficiency, but also substantial shifts to less polluting modes of transport.[12]

[10] Australian Government. *National Greenhouse Gas Inventory: Analysis of Subsectoral Trends and Indicators 2005*.
[11] Intergovernmental Panel on Climate Change. *Fourth Assessment Report*, 2007.
[12] P. Moriarty and D. Honnery. "The prospects for global green car mobility". *Journal of Cleaner Production*, vol. 20 (2007), pp.1-7.



Share of Australian transport-related greenhouse emissions in 2007 from all sources.[13]



Transport emissions in 2050 based on a 60% reduction (left) or 80% reduction (right) from current levels, assuming no change to current levels of car usage but with all motorists switching to the 'greenest' car currently imaginable. An 80% reduction is now considered a necessary minimum by the IPCC. All emissions other than from passenger cars must be accommodated within the striped slice—despite a projected doubling in road freight volumes.

The Myth of the Green Car

For many years the road lobby has encouraged the view that a combination of technology and the market—in short, doing nothing—will reduce the carbon emissions from transport as if by magic. Worryingly, this view is becoming increasingly influential in official circles, such as the Garnaut Review of climate change, and the modelling carried out for the Victorian Transport Plan.

To believe some of the hype, new technologies such as plug-in electric vehicles won't just solve our greenhouse problems, but will somehow also reduce traffic congestion, road trauma and parking hassles as well!

The idea that technology and the market will usher in an age of 'green motoring' flies in the face of half a century of automotive history, that shows Australian car buyers are reluctant to trade off performance for lower fuel consumption. When the Australian Bureau of Statistics produced its first *Survey of Motor Vehicle Usage* in 1963, the average fuel consumption of all Australian cars was 11.4 litres per 100km. The most recent version of the same survey (from 2007) puts average fuel consumption slightly *higher*, at 11.7 litres per 100km!

Sometimes it's suggested the reason fuel consumption isn't falling is that Australians hang on to their fuel-hungry 'old bombs' longer than Europeans or the Japanese. But the same *Survey of Motor Vehicle Usage* shows this is not the real reason. Indeed in 2006, those who drove cars bought between 1990 and 1999 actually got *better* fuel consumption on average (11.1 l/100km) than those who drove cars bought since 2000 (12.1 l/100km).

[13] Bureau of Infrastructure, Transport and Regional Economics. *Transport Statistics*, 2008, Table 21. The 'Motorcycles' category is omitted as emissions are too small to be discernable in the diagram. International aviation is excluded from greenhouse accounts.

The real reason fuel economy isn't improving has to do with the way the market actually works. Instead of producing cars with better fuel economy as engines become more efficient at using fuel, the market uses the more efficient engines to provide bigger, higher performing vehicles with more power-hungry features such as air conditioning and power steering.

This is seen most obviously in the trend toward large four-wheel-drives, which showed no sign of abating[14] even under high petrol prices. In fact, an historical study of the American car market through previous oil shocks has suggested that high fuel prices, by associating fuel economy with material deprivation and sacrifice, actually undermine longer-term trends toward efficient vehicles in the minds of consumers.[15]

Even the new Toyota hybrid car to be produced in Australia (with generous support from the Australian taxpayer) will be a full-size sedan, with fuel economy not much better than that of conventional small cars that have been on the market for decades. These 'green' cars will be targeted at government fleets, so that the typical buyers will be politicians and public servants driving alone into city centres at taxpayers' expense.

Nor will it do to gesture in the direction of renewable electricity as though it will deliver emission-free motoring for all. We already face the task of displacing the huge demand now met by coal-fired power stations: to expect renewables to do that *and* meet all the demands of the transport sector as well is rather like betting on the lottery to fund one's retirement.

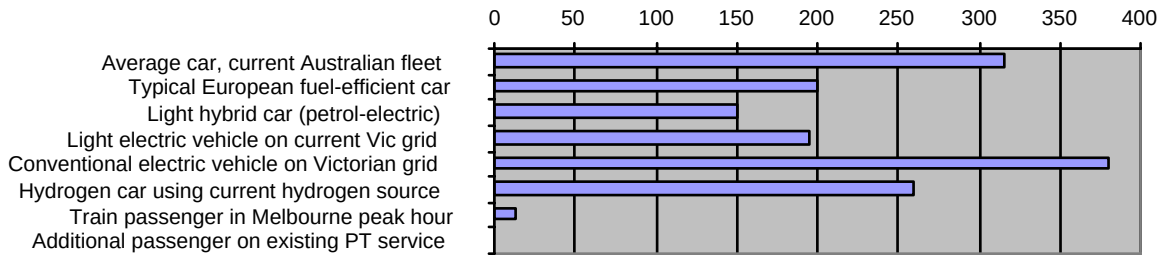
It's sometimes said that an economist is someone who believes pigs will grow wings if the price signal is right. ("If the price is high enough, even roosters will lay eggs" is how ABARE chief Brian Fisher expressed it in 2006.) Green motoring shares this element of wishful thinking with 'clean coal': in both cases dirty industries hope technology and market forces will somehow let them off the hook, even though the imagined solutions are unproven, of limited effectiveness, slow to develop, and may have unforeseen side effects. But the sober reality is that 'clean' coal technology actually has a *better* chance at success than green cars. Although coal-fired power stations are huge, their actual number is quite small, so one only needs to refit a few to get big results. For green cars to make a difference, they will have to come to market in huge numbers and persuade millions of consumers to buy them. As we've seen, that's a big ask.

Compared to the completely hypothetical world of green motoring, how does public transport really stack up? There are cities, not only in old-world Europe but also in new-world North America, where public transport carries well over 20% of all trips people make—not because they're forced into it but simply because public transport is more attractive to them. Public transport is making a big difference in these cities, right now, today. Well-used public transport also has only a fraction of the greenhouse emissions of cars; this is so even for coal-fired electric trams in Melbourne.

In short, public transport is a proven, effective way to drastically reduce our contribution to climate change from the travel we do in our day-to-day lives, and it is available right now (though in Melbourne it has yet to be made to work properly). The 'green car' is a chimera, which may show some promise at an unspecified date in the future, or may not. It would be foolish to pin all one's hopes on it.

[14] Strong sales of 4WDs continued unabated right until the Global Financial Crisis reached Australia in late 2008. The real losers from high petrol prices between 2005 and 2008 were large six-cylinder sedans, virtually the sole product of the Australian car industry. It is largely lack of product diversity, rather than high petrol prices *per se*, that explains the poor fortunes of the Australian industry to date.
[15] Tom McCarthy. *Auto Mania: Cars, Consumers and the Environment*. Yale University Press, 2007.

> The great obstacle is simply this: the conviction that we cannot change because we are dependent on what is wrong. But that is the addict's excuse, and we know that it will not do.
>
> —Wendell Berry[16]



Greenhouse emissions from various technologies (grams CO_2-e per vehicle-km)

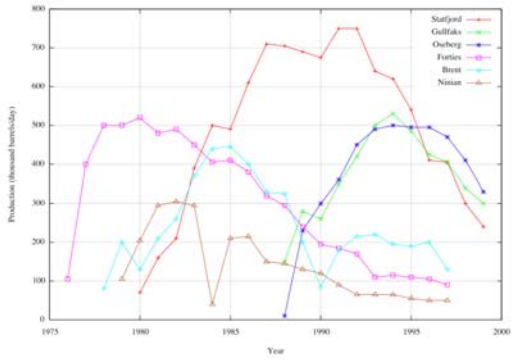
2.4 Petrol Prices and Peak Oil

Most hard thinking to date about alternatives to petrol-fuelled, single-occupant cars is due not to climate change, but to the ratcheting-up of petrol prices between 2005 and 2008. This has all to do with the balance between global supply of, and demand for, crude oil. Demand for oil has grown unabated year upon year, thanks in large part to newly industrialising countries led by the biggest of them all, China. Even during recessions the global demand for oil can still go up, even if not as fast as before. But supply has not been growing unabated to match demand—and there are now serious questions being asked about how reliable that supply really is, even while bad economic conditions have given us a brief reprieve.

Of course, the idea that the world would suddenly *run out* of oil is little more than scare-mongering. It ignores the way real oil fields operate: they don't produce at maximum capacity and then suddenly run dry, the way a car does. As the figure below shows, their output peaks about halfway through their production cycle and then gradually tapers off, like a battery-operated lamp. The real question is not how much oil we have left (there's plenty); it's the *rate* and the *cost* at which we can pump it out of the ground, versus the (ever increasing) rate at which the world uses it up.

'Peak oil' refers to the time when the combined output of all the world's oil wells reaches its maximum. Most regional oil supplies apart from the Middle East have passed their own peaks already: USA production peaked in the early 1970s; the North Sea in the 1990s; and Australia shortly after 2000. Note that all these regions are still producing; just not at the same levels they were in the past. The global peak, meanwhile, is expected sometime in the next decade. Precise estimates are difficult because we don't know how long the economic slowdown will last, and because Middle Eastern governments are quite secretive about the state of their actual oil reserves. But once this is reached, with demand still increasing and supply now starting to decline, a huge gap will open up between supply and demand, forcing prices steeply upwards.

[16] Wendell Berry, "Word and Flesh" from *What Are People For?*, 2005. Reprinted online by Vermont Commons, www.vtcommons.org/journal/2005/06/wendell-berry-word-and-flesh-0.



Production from six North Sea oil fields, showing initial rise, peak and gradual decline

It is probable that high oil prices played a part in the current economic crisis, chiefly by placing budget pressures on car-dependent American consumers already struggling to service large housing debts. Even earlier this decade, when oil prices were still relatively low, commentators were warning us to expect an evolving link between oil shortages and economic cycles in the future:

> World economic activity promises to be volatile through 2010 (and beyond). At best, oil shortages will put mild to moderate downward pressure on economic activity. At worst, shortages will drive the world economy into a depression. Declining economic activity will bring down the demand for oil, forcing producers to reduce the price as they compete for market share. There will be a temporary surplus of oil to support renewed economic activity. As the world's economy picks up, excess production capacity is quickly absorbed and shortages again make their unwelcome appearance. The world economy will subsequently go into another decline and the economic cycle will be repeated.
>
> During these cycles, the price of oil will fluctuate in response to sizeable changes in consumer demand, hence the wide variation in projected prices.
>
> —Ronald Cooke, *Commentary on EIA/DOE Oil Price Forecast*, 2004[17]

Notice that what is predicted is not just an oil shortage leading to reduced economic activity, but also a drop in oil prices during the slump: exactly what we saw from late 2008 onwards. If such forecasts are also correct about the effect of an upswing, it does not bode well for an economic recovery. Hence the push by many governments—most notably the Obama Administration in the United States—to reduce their economic dependence on oil.

Although oil is the basis for many plastics, fertilisers and other petrochemical products, the main factor keeping us dependent on such vast quantities of oil is its superior qualities as a transport fuel. Petrol has a truly enormous energy density—around 12 kilowatt-hours per kilogram—which makes it supremely attractive for use in road vehicles, that must carry their energy source around with them. Were it not for our dependence on cars and trucks, we could meet a large part of our transport needs with electrified rail, and buses (with their much lower energy use per passenger). And since in Australia more than 80 per cent of oil is used in transport,[18] meeting our transport needs in other ways makes us much less dependent on it.

But as with the greenhouse emissions from road transport, vested interests will always maintain that some kind of technical fix will allow us to maintain the car-dependent status quo. In their fantasy world, all we need to do is find some other way to fuel cars and trucks.

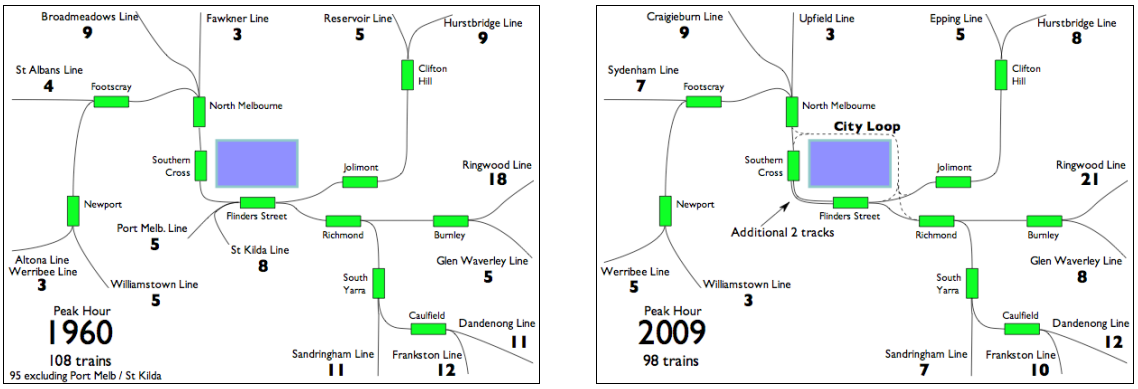
[17] Published online at http://www.oilcrash.com/articles/cooke_03.htm (accessed 2 February 2009).
[18] Reserve Bank of Australia. *RBA Bulletin September 2008: Oil Prices and the Australian Economy* (2008).

To date, however, none of the proposed fixes are likely to allow us to maintain present levels of car and truck use at reasonable cost. Habits of transport made possible by a seemingly limitless supply of cheap crude oil over the past century cannot be adapted to the alternatives without substantial change: most importantly a contraction in scale. Biofuels are no panacea: converting the entire Australian wheat crop to ethanol production would only feed one-sixth of the current vehicle fleet, and there's only so much leftover cooking oil available for do-it-yourself biodiesel to be at best a cottage industry. And while it would be technically feasible to convert our ample coal supplies to liquid fuel, the resulting fuel would be expensive (most likely $2 a litre or more) and would have at least three times the greenhouse emissions of petrol. A project to convert coal to liquid fuel in the Latrobe Valley was recently shelved as too costly, despite receiving generous financial support from the same Victorian Government that refuses to build new train lines to Melbourne's suburbs.[19]

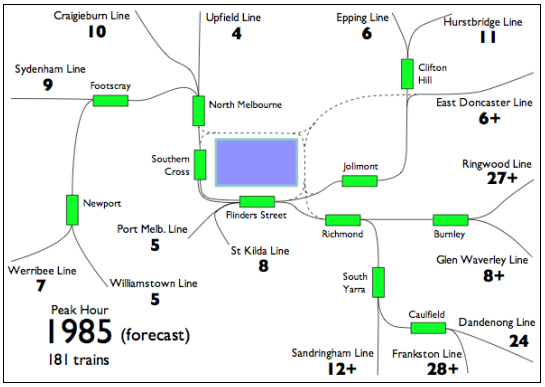
To sum up: the current economic slowdown has bought us some time in which to reduce our dependence on oil, to avoid another round of certain petrol-price pain when the economy recovers. However, a large part of the solution will have to involve shifting from car and truck transport to public transport, rail freight, walking and cycling, if we are to maintain any semblance of present-day lifestyles.

2.5 A Rail Capacity Crisis?

Having discussed the many very real aspects of Melbourne's transport crisis, it's necessary to deal with a fictitious one that is standing in the way of a timely solution to our problems.



Suburban train arrivals at Flinders Street, 8am-9am, 1960 and 2009[20]



Suburban train arrivals envisaged in 1985 by the City Loop's planners in 1969[21]

[19] "Fuel clean-up put aside as too costly," *The Age*, 3 December 2008.
[20] Victorian Railways working timetables (1960) and Connex timetables (November 2008).

In the 1990s, the most pernicious urban myth about public transport in Melbourne was that it couldn't be made to work because Melbourne was too spread-out and low-density. Public transport services, it was said, simply couldn't attract enough passengers per kilometre to be viable.

Ironically, since the turn of the century this has given way to its logical opposite: the myth of public transport's 'capacity crisis'. We are now being told that the recent surge in patronage on peak hour trains, and the resulting overcrowding, means that:

- We can't add many more services to the existing system until we've spent ten years and multiple billion dollars building new tracks and tunnels; and
- As a result, achieving any further gains in public transport patronage quickly or cost-effectively is simply impossible.

This myth is behind the growing official view, spurred on by the road lobby, that public transport has no meaningful role to play in mitigating climate change, and that the easiest way to reduce our CO_2 emissions is with phoney solutions like more fuel-efficient cars, not with public transport. It's even been suggested that it may be more socially desirable for *less* people to use public transport—which might make life easier for our privatised transport operators, but not for anyone else!

Of course, right now we do have a severe problem with overcrowding on trains in peak hour. But as we explain below, this is not actually an infrastructure problem at all: it is a management problem. Part of the problem is that we are wasting capacity by not running the train system in the way its planners intended. This has also been compounded by poor management decisions, such as selling many working trains for scrap between 2002 and 2005 and creating an artificial shortage in rolling stock. For the most part we are suffering from a shortage of trains—not of tracks—for which our public transport operators and government planners are jointly culpable.

To understand why there really is no capacity crisis, and why a rapid shift from car use to public transport use really is possible as well as simply worthwhile, it helps to review a little history and trace the patterns of growth and decline in public transport that have led to our present-day situation.

1850 to 1950: The World's Premier Public Transport City

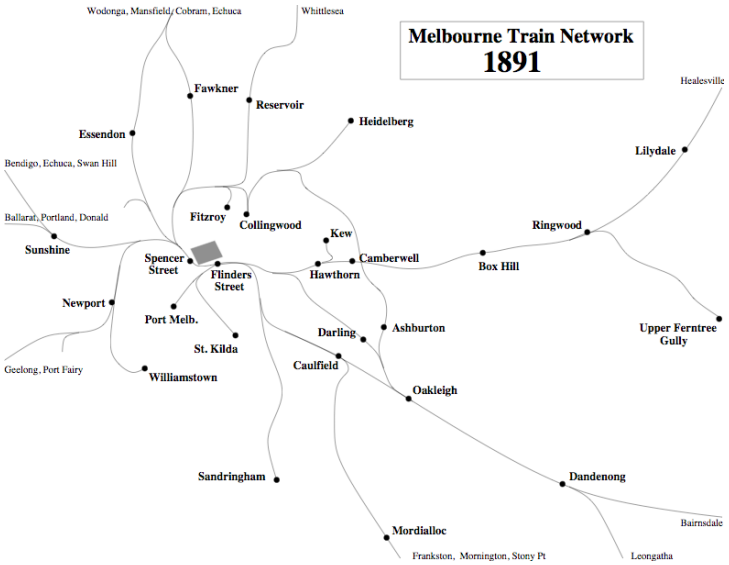
The huge numbers of passengers we are seeing on trains in peak hour, far from being unprecedented and problematic, were all in a day's work for past generations of Melburnians. When gold was discovered in Victoria in the 1850s, Melbourne rapidly evolved from a colonial outpost to one of the wealthiest cities in the world. Since railways were the epitome of industrial progress at the time, and because in those days rail access was crucial to the development of new suburbs, much of this new-found wealth was invested in trains and tracks.

By the 1920s Melbourne was a city of a million people, with a newly electrified train network that was the envy of the world. With few exceptions the network was identical to what we have today. Flinders Street Station in the morning peak was a hive of activity beyond anything we can now imagine, with 116 suburban train arrivals in the busiest hour and no City Loop to distribute people around the CBD.

In those days virtually everyone was a train or tram user, whether to go to work or to go shopping. Annual patronage on the train system was climbing toward 200 million passenger

[21] *Melbourne Transportation Plan*, 1969. '+' indicates figures are ambiguous and likely to be higher than stated.

trips, with 30 million of those on the Sandringham line alone.[22] Yet the system was also seamlessly managed: Railways Commissioner Harold Clapp insisted on, and achieved, a goal of 100% on-time running. (As one traveller quipped, "Mr Clapp's ruthless efficiency means that we have lost another excuse for being late in the mornings."[23]) This was a system that people very clearly cared about!



Even in the 19th century, Melbourne's extensive train network allowed the development of suburbs far from the city. Melbourne's landscape of 1/4-acre blocks owes more to the early investment in public transport than to the coming of the motor car 50 years later.

But the real challenge for the future, according to the planners of the day, wasn't how to move more trains through the system, but rather how to get everyone in and out of Flinders Street Station. It was to deal with this issue that the very first plan for a rail tunnel under the CBD was proposed, by the Metropolitan Town Planning Commission in 1925.[24] The MTPC projected that annual train patronage would increase to some 370 million passenger trips by 1964 and an underground railway would be needed, not to deal with track congestion, but to provide alternative destinations to Flinders Street.

The MTPC plan was a kind of Art Deco version of our own infrastructure-heavy Victorian Transport Plan. But of all its grand plans for the city the only one to come to fruition was the Glen Waverley line, completed in 1930. To this day it remains the last new suburban rail line to be built in Melbourne. Official concern for the public transport system as an integral part of life in Melbourne and Victoria had already passed its peak, and in the following decades a new planning mindset was to take hold.

Planning for Decline and Stumbling on Growth: a Parable

The forecast of 370 million train passengers in 1964 never eventuated. The reason, as we know in hindsight, is that public transport planners failed to respond to the challenge of the private car.

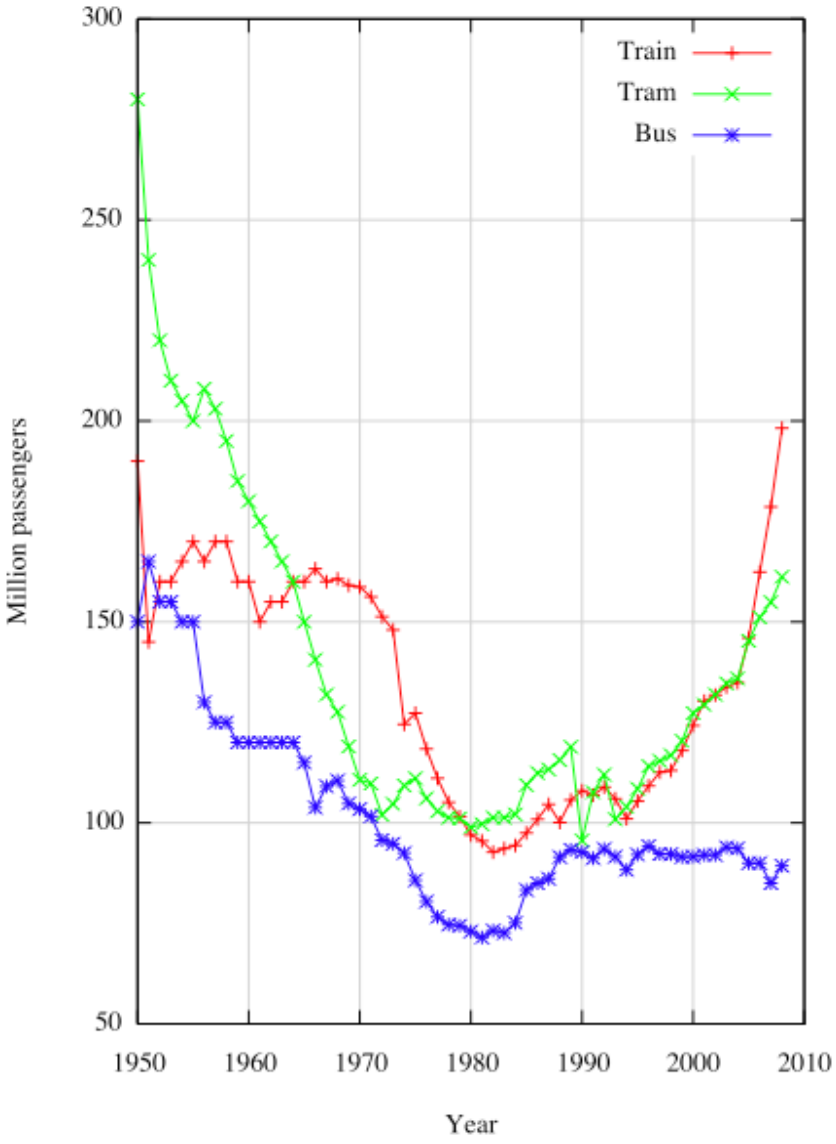
The growth of car ownership after World War II exposed a critical weakness in the system. Trains, trams and buses were run as stand-alone operations with no overall coordination, and were oriented toward 'captive markets' of people who needed to go from A to B and had no

[22] *Bradshaw's Guide to Victoria*, 1929.
[23] Melbourne *Punch*, 29 June 1929.
[24] Metropolitan Town Planning Commission. *First Report*. Government Printer, Melbourne, 1925.

other way to do it. After the Clapp era of the 1920s gave way to the Depression and war years, operators became complacent and were inclined to take their passengers for granted. Reliability was suffering, and the privations of wartime had led to severe overcrowding, brought on by rolling stock shortages. Already in the postwar era, management prerogatives were overtaking passenger interests in the bureaucratic culture.

Patronage on the system reached its peak around 1950 with 200 million train passengers, 280 million tram passengers and 150 million bus passengers, and then went into free fall. By 1964 tram use was down by a third, and train use by 15%.

The initial response of the public train and tram operators was contradictory. On the one hand they responded to the declining patronage with service cuts, ensuring that cars would become even more attractive as an alternative. But when it came to planning infrastructure, they preferred to imagine the decline would somehow reverse of its own accord, and resume its pre-1950 growth trend. No-one could say why, since there was no effort being made to actually compete with the car.



Public transport patronage in Melbourne since 1950. Patronage went into freefall in the 1960s and 1970s and has only recovered to early postwar levels in the last five years.

It was this rather muddled thinking that gave us the 20th century's single biggest investment in Melbourne's rail capacity, the underground City Loop. Like its 1925 predecessor, it was justified with an ambitious growth projection: by 1985, it was said, Melbourne would have a population of 5 million, and there would be 181 trains per hour arriving at Flinders Street, compared to 108 in 1964 and 116 in 1929. But one suspects the real justification was political: in the 1969 *Melbourne Transportation Plan*, it was the City Loop that provided the 'balance' to the even more ambitious plans of the road lobby (see Section 2.2).

The great irony is that for the next 35 years, the City Loop seemed doomed to never live up to its full potential. The first station opened in 1981, and coincidentally this was the year public transport use in Melbourne finally hit bottom. At a mere 93 million passengers, train patronage was less than half the level in 1950, despite the city's population being twice as great. Tram patronage, at 99 million, was down nearly two-thirds on its early postwar highs.

By this time, public transport planners had all but conceded defeat. Accompanying the steady stream of service cuts there were now fare rises, to try and plug the budget deficits now appearing on the departmental accounts. Of course, this only helped drive more passengers away. Transport managers from the 1970s on were engaged in what might be called 'planning for decline'—a tendency that has continued until very recently.

Below we list just some of the more notable 'achievements' of this period. They provide an important context for understanding the government's reaction to the present-day crisis.

- **The Lonie Report.** Released in 1980, this proposed drastic cutbacks in public transport, including the closure of six suburban train lines, the axing of seven tram routes, replacement of all trains by buses on evenings and weekends, bigger fare increases, and the complete closure of the country rail network (Geelong excepted). Opposition to the Lonie Report was led, not by the managers of public transport (who tacitly accepted the cutbacks), but by unions and community groups (and a youthful PTUA).
- **Light rail conversion.** From the mid-1980s, Melbourne's rail planners enthused about converting less-patronised train lines to 'light rail'. This was code for shutting down the train service and substituting a tram service with one-third the carrying capacity. In the case of the St Kilda and Port Melbourne lines the bureaucrats succeeded: it is to them that residents of the City of Port Phillip owe their overcrowded tram services. The Upfield line narrowly escaped a similar fate in the 1990s.
- **The Southland station saga.** Southland shopping centre in Cheltenham has a train line running straight past, but no station. This is not for want of trying. In the early 1990s a plan to build a station won the support of the shopping centre owner, the local council and residents: the only opposition came from the public transport managers.
- **Ongoing resistance to service improvements.** Since the 1980s public transport managers have actively resisted calls for new lines or frequency improvements, and in doing so have served as one of the road lobby's most valuable allies. In 1991 a trial of modest frequency increases on the Sandringham line (from 20 to 15 minutes) only went ahead after the government forced the rail managers to try it; the trial generated revenue increases that exceeded the cost of the additional services, yet the managers' internal newsletter reported it as a failure.[25] Meanwhile, the same managers were trying to destroy the case for a train line to Doncaster by artificially inflating the costings. In doing so they assured the success of the road lobby's case for extending the

[25] John Stone. *Political factors in the rebuilding of mass transit*. PhD Thesis, Swinburne University of Technology, 2008, p.199.

Eastern Freeway instead. The same strategy helped block proposals for the Rowville line in the late 1990s, and the South Morang extension more recently.

- **V/Line closures.** Train services to many country destinations including Mildura, Horsham, Echuca, Cobram, Bairnsdale and Leongatha were withdrawn in the early 1990s. A few of these towns have since had their service restored through direct political intervention. However, the government has only in 2008 confirmed that there will be no restoration of the Leongatha train service, and it is proceeding to tear up the tracks for scrap as part of the line's conversion to a bike track.
- **Loss of railway stations from country towns.** Even some country towns that have kept their train service have lost their railway station. Residents of Echuca and Wodonga must now travel out of town just to catch a train, while the former station sites provide a windfall to real estate developers.
- **Regional Fast Rail.** Even amid service expansion, the symptoms of planning for decline can be found. In a short-sighted move, most of the second rail track between Kyneton and Bendigo was ripped up in order to provide a marginal speed advantage on the remaining single track. This will severely constrain future services on the line to Bendigo and northern Victoria, which had been a double-track line ever since the 1860s.
- **Trains in the bin.** In a cost-cutting exercise between 2002 and 2005, private train operators and the State Government colluded in the scrapping of most of Melbourne's elderly but still serviceable Hitachi train fleet. This is the main reason why Connex cannot run more peak-hour services today to relieve overcrowding.

Given this history of planning for decline, perhaps it's to be expected that when train patronage *did* start growing again, the managers were caught completely by surprise, and have struggled to find an adequate response.

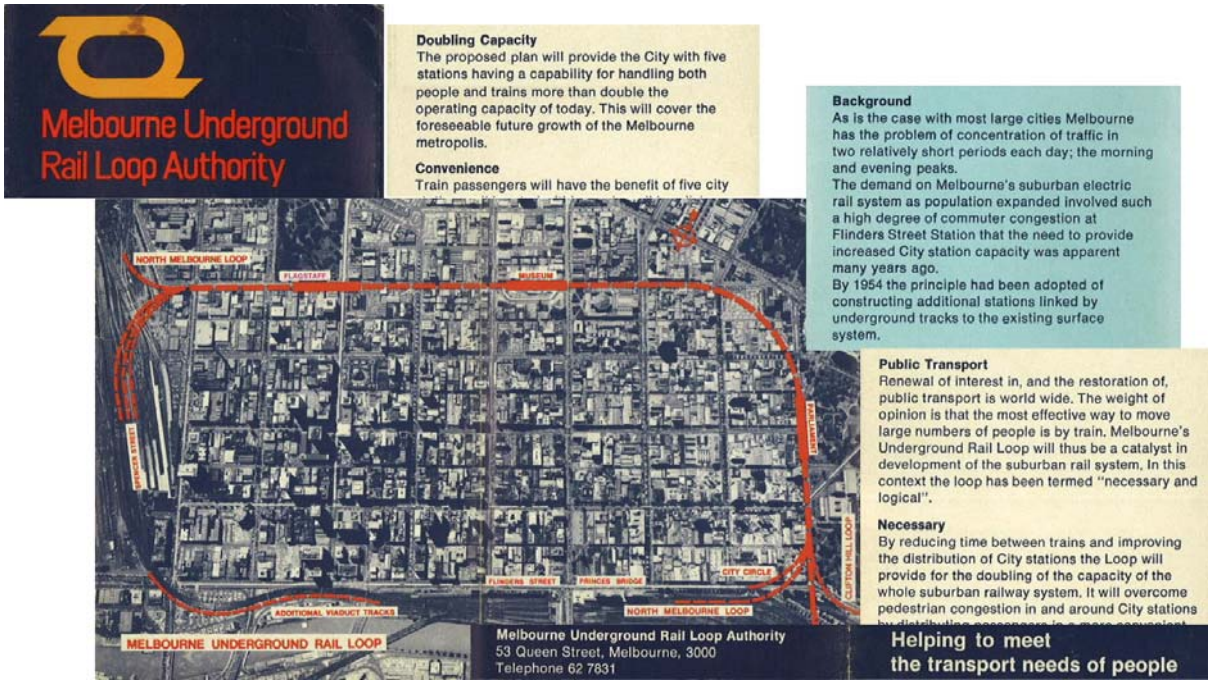
From the low point in 1981 until about 2005, public transport patronage had grown slowly, just barely matching the growth in population. Car travel grew much faster, and so public transport's mode share had continued to fall. Mode share reached its lowest point in 2004, at less than 8% of motorised trips in Melbourne.[26]

As recently as 2003, private train and tram operators were reducing the size of their fleets and negotiating increased subsidies from the State Government on the basis that they weren't carrying enough passengers to be commercially viable. But in just a few years, cries of too few passengers had given way to cries of too many passengers. Suddenly, there was crowding on trains at a level not seen since just after World War II—though, as it turns out, with more tracks and fewer trains than we had at that time.

Collective Amnesia

Amid all the panic over rising patronage, it appears as though the planners have all forgotten that the infrastructure to solve the problem of central-city capacity *is already built*. The rail planners of the 1960s did, after all, succeed in getting their City Loop built 'just in case' the patronage decline went into reverse: it just took longer than anyone in the 1960s had imagined. In the meantime its presence has been taken for granted, to the extent that no-one in officialdom seems to remember why it's there in the first place.

[26] Victorian Budget Papers, 2007. <http://www.budget.vic.gov.au>



Extracts from a 1970s City Loop brochure

Taking into account the loss of the St Kilda and Port Melbourne lines, the 98 suburban trains that run into the city in peak hour in 2009 are about the same number as in 1964, and several trains shy of the previous record set in 1929. The planners of the City Loop were motivated more by passenger capacity at Flinders Street than by track capacity, but in any case we have their word—through ten years of plans and publicity material—that their plans would suffice to nearly double the number of peak hour trains.

In the face of all this evidence, those planners' present-day successors are asking us to believe, with their talk of 'capacity crisis', that the City Loop *didn't really add significantly to central city train capacity at all*. In effect we're being asked to accept that the City Loop was not just the single biggest capital expenditure on public transport since the 1920s, but also the single biggest con perpetrated on the Victorian taxpayer in the history of the state!

The evidence on the ground gives us every reason to take the 1960s planners at their word. Quite clearly, there are more 'train paths' through the city than there were in the 1960s. The alternative is far from appealing: if we are to give no credence to the statements of planners in the 1960s (who had spent decades looking after, if imperfectly, a system with nearly 200 million train passengers annually), what does that really say about the statements of their present-day counterparts?

The most rational explanation for this disconnect between past and present is that modern-day planners, whose experience spans the years of lowest patronage rather than those of highest patronage, lack experience with the 'challenges of growth' that faced previous generations of public transport managers, and that are routine for operators in other cities around the world.

When systems suffer low passenger numbers for long periods of time, the operational habits gradually evolve toward practices that require less effort to manage, as long as there aren't too many passengers. We can see examples of this all over the system: timetables that schedule almost all trains through the City Loop (contrary to the 1960s plans, which assumed a large number of trains would still run direct); the handling of wheelchairs by train drivers rather than platform staff (saving on staff costs at the expense of slowing down trains and re-

ducing track capacity); and uncontrolled growth in the number of different stopping patterns (avoiding the need for wholesale reviews of timetables, at the expense of inefficiency in use of the tracks).

So the real source of our problems is that our public transport planners are still operating with a low-patronage mindset in a high-patronage world. The crisis is one of management rather than infrastructure. The same tracks that ran a high-patronage system from the 1920s to the 1960s are still available, and have been added to since, but the knowledge of how to do so is largely lost.

Fortunately, the necessary expertise does exist in other cities (in Europe in particular), so the real imperative for our rail system is to import more of this expertise in order to relearn the habits of high patronage. Thanks to the loud voices of train passengers, efforts in this direction have begun, and there are big operational changes happening behind the scenes (while publicly, the government goes on speaking of a capacity crisis). It is this operational and management crisis that will require the bulk of attention in the coming years to meet the challenges of growth.

Meanwhile, the main thing preventing the running of more peak-hour services now is a lack of trains, thanks to asset-stripping in the early years of privatisation. For this, the government only has itself to blame. Nonetheless, we are assured that more trains are on the way, and the government will then have no excuses. In Chapter 4 we discuss the management changes that are required to ensure that the system is able to respond to future challenges.

3 Distractions and Blind Alleys: Why the Crisis Continues

> You can always count on Americans to do the right thing, after all other options have been exhausted.
>
> —Winston Churchill

As with American foreign policy, so it is with Australian transport policy. In Chapter 2 we saw that the government has so far failed to offer a solution for our transport crisis, other than persisting with the same policies of road-building and car-dependence that got us into a crisis to begin with.

So why, when other cities around the world are actively pursuing sustainable transport solutions, are we finding this so hard in Melbourne?

There are two factors in this ongoing failure. One is the entrenched vested interests, in the road lobby and in public transport management, that use urban myths and public-relations spin to distract us from finding real solutions to our problems. The other is a government that allows transport policy to be driven down blind alleys by these vested interests, instead of pursuing the public interest in fast, efficient and sustainable transport.

So while we may count on our government to one day do the right thing, there is work to do yet to convince politicians to act in the public interest. The following looks at these distractions and blind alleys in more detail, before outlining the alternative in Chapter 4.

3.1 Urban Myths From the Road Lobby

Most of our present-day difficulties stem from the distant past, and the false leads of the 1950s and 1960s, when cars seemed like a panacea for transport problems. Back then, when many urban roads were still half-empty and congestion seemed manageable, it was easy to imagine a future where everyone would zip around the city in their automobiles with a minimum of hassle, given a sufficient supply of roads and petrol.

Unfortunately, as a society we have had trouble updating our thinking since then, and in Melbourne the road lobby has done their best to distract us from modern-day realities, by continually breathing new life into the urban myths that support the old 1960s ways of thinking.

Below are just a few examples of transport clichés you've probably heard, that are thoroughly refuted by the actual evidence. For more examples and full details of the evidence, refer to the PTUA website at www.ptua.org.au/myths/.

Myth: Freeways relieve traffic congestion

As we discussed in Section 2.1, though freeways may provide some short-term relief, within a short time the extra road capacity generates more traffic than there was before. In the long term freeways just allow congestion to grow further: they don't reduce it.

This idea lies at the root of a whole family of urban myths. Because freeways are held to reduce congestion, they are also said to reduce pollution (by turning stop-start into free-flowing traffic), to reduce travel times, to move freight more efficiently and to grow the economy. All such pronouncements ignore the feedback effects discussed in Section 2.1. There is quite simply no evidence anywhere of a major city reducing congestion by building freeways.

Myth: Freeways are needed for cross-suburban travel

In Melbourne, most long-distance travel is still radial: to or toward the city centre. Cross-suburban travel is a small proportion of all travel and is well within the capacity of the existing arterial road network. Most congestion on cross-suburban roads is the cumulative effect of lots of short-distance travel. This is part of the reason Eastlink has failed to attract as much traffic as expected (aside from high fuel prices and an economic slowdown, of course).

Myth: Freeways are for freight, not commuters

Freight movement has become a convenient excuse to build freeways. However, there is no road in Melbourne where trucks outnumber private cars, and the extra commuter traffic generated by new roads is an impediment to efficient freight movement. The only empirical study of freight movement in Melbourne found that, outside peak hours, there is relatively little interference to freight traffic, and most freight travels outside peak hours anyway.

Myth: More freeways will promote economic growth

In Melbourne, the suburbs with the most freeways are also the ones with the highest unemployment. The factors that make a city an attractive place to do business have little to do with how many freeways a city has and everything to do with liveability factors, such as the availability of public transport.

Myth: Roads and public transport complement each other; they don't compete

Roads and public transport are in direct competition: each additional trip by car is one trip not taken by public transport, and vice versa. Investment in big new roads creates traffic in part by undermining public transport use; on the other hand, investment in public transport can help take traffic off the roads, but only if we refrain from building roads at the same time.

Myth: Viable public transport requires high population densities

Public transport runs successfully in many cities with similar or lower population densities than Melbourne. Any city with sufficient population density to cause traffic congestion has sufficient population to support a first-rate public transport alternative.

Myth: Melbourne's outer suburbs aren't suited to public transport use

Melbourne's outer suburbs are built to the same density as inner and middle suburbs with higher rates of public transport use. There is little difference in form between older 'train' suburbs like Blackburn and Frankston and newer 'car' suburbs like Rowville; the only difference is historical, between public transport provision in one, and non-provision in the other. Melbourne needs better public transport in its outer suburbs *because* people prefer to live in detached houses on quarter-acre blocks, not despite this.

Myth: People who own cars won't use public transport

We agree that it’s pointless telling people to give up their cars, but this isn’t actually necessary. While pro-car ideologues have tried to scare people with bizarre fantasies about the

Public Transport Thought Police commandeering people's vehicles, back in the real world no such thing has ever happened. Most people will continue to own and use cars, just as they do in European cities where public transport use is high. But to suggest that once people own cars they will use them unthinkingly for every single journey is to insult people's intelligence.

Myth: Public transport is just as greenhouse intensive as cars

Although people in near-empty trains can have the same CO_2 emissions per passenger as in cars, it is a while since Melbourne's public transport was so poorly patronised. In 2003, a well-publicised conference paper claimed that tram passengers had higher CO_2 emissions than car drivers, but the authors provided no evidence for their claim, and other calculations using published patronage data and manufacturer's figures support the opposite conclusion. In well-used systems, the average passenger has a fraction of the CO_2 emissions of the average motorist.

3.2 The Sorry Legacy of Privatisation

With the road lobby so intent on distracting us away from public transport solutions to our transport problems, perhaps we could have counted on our privatised train and tram operators to offer some opposition. This of course was what Kennett's economic rationalists promised us prior to 1999: that a privatised system would encourage operators to be 'innovative' and to find ways to build patronage.

Of course, no such thing has happened. In the first five years after privatisation, patronage grew more slowly than in the five years before it. Patronage did eventually start growing in 2005, particularly on trains, but this had nothing to do with any 'innovations' by Connex or Yarra Trams. In fact one may judge from their panicked reaction, and their failure to address severe peak-hour overcrowding, that patronage growth was never even on their minds. Connex in particular was simply too busy throwing out older trains to think of doing any contingency planning on the off chance that people would actually start using public transport again.

All that privatisation has done is confirm what many of us feared in the late 1990s: that it would be the pretext for the government to wash its hands of responsibility for the chronic problems of the system, and to minimise the *political* damage from ongoing public transport failures. Former Transport Minister Peter Batchelor was unwavering in his insistence that system troubles were problems for Connex and Yarra Trams, not for himself. His successor Lynne Kosky took things one step further, proclaiming (before she was forced to recant) that she did not even want to hear complaints and that it wasn't her job to run public transport!

This lack of responsibility means that there is no-one, at any level of management, who is looking after the things that really matter to the travelling public. You may think your bus service isn't frequent enough, or doesn't arrive at the station in time to catch the train, or is so expensive to use that it's cheaper to drive the car anyway, but *no-one in officialdom cares.* Not the hundreds of bureaucrats in the Department of Transport, and not the managers at Connex or Yarra Trams or the bus company. The system simply doesn't provide for anyone to be making sure the system actually *works*—other than by ticking the technocratic boxes of 'prudential contract administration'.

While one half of Victoria's transport planning is run by the road lobby, the other half is run by the same managers and consultants who designed and carried out the Kennett Government's privatisation of public transport in the late 1990s. During this period the managers

didn't even work in the transport department, but in a 'Transport Reform Unit' within the Treasury—hardly a division of government likely to care much about what the needs of travellers might be. The managers are now engaged in a dual exercise: on the one hand defending the privatised system they created, in all its Byzantine complexity; and on the other, finding ways to limit the political damage their system is doing to the government. This way of running things is hardly going to make things better for passengers.

But now contrast the way our system is run from what happens in most other cities. Most European and North American cities (as well as Perth and now Brisbane) have, like us, moved away from the old model of public transport management where the entire system is run by a government bureaucracy. But they have done so in a way that is completely different from our privatised system. In these cities, an independent public agency—rather like Vicroads here—plans and coordinates public transport, overseeing and directing both public and private service providers. These agencies understand that running a public transport network is about more than just writing and administering contracts: they also prepare the timetables, determine route structures and actively plan future network extensions. But most importantly, these agencies judge their performance according to real passenger outcomes. Many of them include community and passenger representatives on their advisory boards, and board members act as advocates for the system.

So while these centralised planning agencies are commonplace overseas, the lack of any such agency here has a lot to do with the poor performance of our system. Our own government, unfortunately, has relied exclusively on the bad advice from the architects of our privatised arrangements, and instead of pursuing a solution to the problems of buck-passing and non-performance, has spent the last decade leading us down a series of blind alleys.

Thanks to this ham-fisted determination to listen to bad advice, Melbourne is now the stand-out example of how *not* to manage public transport, according to a recent report by the OECD:

> The list of key actions that franchisors should *not* do when adopting franchising is short, but crucial; the list is derived from the British and Australian experiences… Avoid giving franchises too much leeway in influencing network interactions as this undermines network integrity… Avoid 'cosy' relationships with the franchisee—this is regulatory capture in another guise… If authorities wish to ensure that the benefits of competitive tendering are realised then this list is 'non-negotiable'.
>
> —Peter Kain, in OECD: *Competitive Tendering of Rail Services*, 2007[27]

For us in 2009, the silver lining to this poor state of affairs is that the existing contracts with the private train and tram operators expire in November this year. (They were actually due to expire last year, but the government granted a one-year extension.) But the government is already moving to re-tender the same contracts with trivial modifications to the same or new operators. The cost of the re-tendering process alone is some $100 million: enough to build a small rail extension, or to weather-proof the suburban train system so that (like Perth's) it can withstand 40-degree days without widespread failures.

The government has already admitted that privatisation is not saving it any money: its excuses for persisting with this failed model repeat the same old clichés about 'innovation' and 'expertise' that Kennett used.

[27] Peter Kain, Bureau of Transport and Regional Economics, Australia. "The Pitfalls in Competitive Tendering: Addressing the Risks Revealed by Experience in Australia and Britain". In *Competitive Tendering of Rail Services* (Organisation for Economic Cooperation and Development, European Conference of Ministers of Transport, 2007), pp. 106–107.

> Returning Melbourne's beleaguered public transport system to full government ownership would not cost taxpayers one extra cent, Public Transport Minister Lynne Kosky says.
>
> Questioned yesterday about the merits of a privatised system, Ms Kosky said: "It's no cheaper. We have had to put a lot more money into the system."
>
> But she defended Melbourne's complicated 'franchise' system, saying it would continue to bring innovation and international expertise to public transport.
>
> "We get that innovation, we get that international experience, not only in running the system but in responding much more quickly to problems," she said.
>
> —"Kosky stands by privatised trains", *The Age*, 24 January 2009

Yet the actual record of private operators over the last decade demonstrates that all the 'innovation' rhetoric is a sham, worthy of the ABC's *The Hollowmen* series. If this re-privatisation exercise goes ahead it threatens to ensure Melbourne continues to set the example of world's worst practice well into this coming century.

3.3 Melbourne 2030 and 'MOTC': Action Through Inaction

> There is an implicit pact offered to every Minister by his senior officials: If the Minister will help us implement the opposite policy to the one to which he is pledged, we will help him to pretend that he is in fact doing what he said he was going to do in his Manifesto.
>
> —Sir Humphrey Appleby, *Yes Minister*[28]

The years 2000 to 2006 were a period when public transport fell off the political radar in Victoria (with the sole exception of Regional Fast Rail). Following the Kennett Government's privatisation, public transport became an 'issue' to be managed for political gain, rather than a service to be delivered in the public interest. Accordingly, there was a proliferation in successive policy documents of slogans, motherhood statements and public-relations spin about how public transport would be improved. Meanwhile, the government's concrete actions on the ground kept the focus on road-building for cars.

Spin Over Substance I: Melbourne 2030

It all began in 2000 with the new Bracks Government's much vaunted 'Metropolitan Strategy'. The idea was that the government would convene community forums all over Melbourne, where people would identify the issues of greatest importance to them and build consensus on strategic priorities for the entire city over the next 30 years. As a process for developing an urban strategy it was potentially a good one: a similar process had been used in Vancouver in the 1990s to frame its highly successful Liveable Region Strategy. And as it happened, the strongest consensus that emerged from these forums was just like that in Vancouver: that a shift in focus was needed away from car travel toward drastically improving public transport.

> The transport and accessibility topic area was the most popular during Round 2 of consultation and almost 33 per cent of forum participants were involved in discussions. Strong support was recorded for initiatives to reduce or improve car usage, and increase the service levels of public transport. Initiatives to encourage

[28] Antony Jay and Jonathan Lynn. *Yes Minister: The Quality of Life*. Season 2 Episode 6, 1981.

> walking and cycling to work also drew general support from participants. The participants in support of more roads and freeways were in the minority.
>
> —Metropolitan Strategy Information Bulletin, November 2001

> We had 1500 people on the consultation process for *Melbourne 2030*, and less than 10 people said they wanted to see bigger roads and the freeway network finished. The rest wanted better public transport, and to be able to walk and cycle safely to more places.
>
> —Dr John Grant, *Melbourne 2030* planner[29]

This exercise culminated in the release of the *Melbourne 2030* planning blueprint in 2002. This, it was claimed, would usher in a new era of transit-oriented development, with new medium-density neighbourhoods supported by fast and frequent public transport.

Yet clearly something had happened during the drafting process. The public transport component in the end was little more than a collection of aspirational statements. Suburban rail extensions were spoken of as 'possible network options', and the 'Major Activity Centres' in the plan were just as likely to be car-based shopping centres as commercial hubs surrounding railway stations. The overall tone of the plan was that public transport was something that appeared by magic once neighbourhoods reached a certain population density. As a document that was supposed to guide transport planning by governments, it was laughable.

Overall, there was actually *less* promised for public transport in *Melbourne 2030* than had been promised when Steve Bracks' ALP won government in 1999, three years earlier. The only specific new transport proposals of any substance, as it turned out, were for new freeways. (And these were not even in the 'transport' section, but buried in 'the economy'.)

So, what happened? It turned out that the genuine views of the community, as expressed in the forums, were filtered through a 'Management Committee' in the State bureaucracy that produced the final plan. Transport was represented on this committee by two groups of bureaucrats: road engineers, who wanted public transport solutions de-emphasised in favour of road solutions; and public transport managers, who were still planning for decline, didn't really want the system burdened with more passengers, and in any case felt that now public transport was privatised there was no need to do any real planning for it anyway. So *Melbourne 2030* is really the story of how the State Government torpedoed community aspirations in the area of transport.

Looking back now at *Melbourne 2030*, one finds that all its freeway projects are built or under construction, while the small public transport projects, such as the Cranbourne East rail extension, have been postponed until 2020 or so. Meanwhile, urban development has proceeded almost exactly as it would have without *Melbourne 2030*, following trends established in the 1990s: on the one hand growth on the fringes, and on the other, infill development and gentrification in the inner and middle suburbs. *Melbourne 2030* didn't establish either of these trends: it simply documented them, then sat back and watched them play out. A recent Monash University study has confirmed that in at least one Melbourne municipality, medium-density development under *Melbourne 2030* has proceeded in an 'opportunistic' rather than 'systematic' manner, and that most of this development has actually occurred in areas *remote* from railway stations and activity centres![30] Even the strongest planning instrument in *Melbourne 2030*, the urban growth boundary, has been relaxed—twice—to allow more urban land to be released on the fringes.

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[29] "Shanks's pony misses out in tussle for funding," *The Age*, 8 November 2008.

[30] T. Phan, J. Peterson and S. Chandra. "Urban Infill: Extent and Implications in the City of Monash." *People and Place*, vol. 16, no. 4, December 2008.

None of this stopped the government claiming that *Melbourne 2030* was a visionary plan for creating a sustainable city, or from waving it at critics when asked what it would do to improve public transport. "We have a target of 20% public transport use by 2020," a spokesperson would say, without explaining what the government intended to actually *do* to fulfil it.

Spin Over Substance II: Linking Melbourne

The pattern established by *Melbourne 2030* continued with subsequent transport plans. The next was the little-remembered *Linking Melbourne* plan of 2004 (which oddly took the same name as a Kennett freeway plan from 1995). This was supposed to flesh out the public transport 'vision' of *Melbourne 2030*, given that many people had now noticed there was little substance behind the spin.

Melbourne 2030 itself had foreshadowed a further set of comprehensive plans for train, tram and bus networks called, inventively enough, 'Train Plan', 'Tram Plan' and 'Bus Plan'. This continued the old bureaucratic habit of treating Melbourne's public transport as three networks rather than one, but at least suggested some real outcomes for public transport might emerge in the future. At least, that was the spin that allowed the government to feign concern for public transport for another two years.

By 2004 the 'Plans' had been internally demoted to 'Resource Documents', and the government was more concerned with re-privatising the train and tram systems after the departure of British operator National Express. Nonetheless, the government said, there would be an exciting 'Integrated Transport Plan' coming at the end of 2004 that would re-ignite the sustainable transport vision and knock the community's socks off.

Given the hype that preceded it, *Linking Melbourne* was even more underwhelming than *Melbourne 2030*. Aside from reannouncing a bunch of initiatives from previous years and touting the new private train and tram contracts, the only new element was the proposed introduction of smartcards—something no-one had asked for, but would ultimately lead to the financial black hole that is Myki.

Spin Over Substance III: Meeting Our Transport Challenges, or 'MOTC'

Linking Melbourne failed to deflect anger over poor public transport in the way the government had hoped. The system was now suffering more than ever from the effects of planning for decline, thanks to years of government neglect and 'hands off' non-management.

The misapplication of funds in the early years of privatisation was now painfully obvious, with shortages of train drivers and rolling stock leading to wave after wave of cancelled services. In 2005, Melbourne lost its 'World's Most Liveable City' ranking to Vancouver, a city with almost no urban freeways but with fast, frequent and cheap public transport. Then in late 2005, Victoria's chief transport bureaucrat sent suburban communities reeling with a declaration that there would be no rail extensions until after 2020.

> Humans might be living on the moon before Melbourne's rail network is expanded, according to the timetable of the State Government's public transport chief. Director of Public Transport Jim Betts told stunned audience members at a transport forum recently that the Government planned no major train or tram extensions during the next 15 to 20 years. Mr Betts' revelation, which is a blow for supporters of rail extensions and new lines to places such as South Morang, Epping North, Cranbourne East, Doncaster and Rowville, came as Transport Minis-

> ter Peter Batchelor confirmed that extending the rail system was no longer a high priority.
>
> —*The Age*, 24 October 2005

The low point for the government came at the end of 2005, when a group of Melbourne councils commissioned internationally renowned Australian transport expert Peter Newman to report on Melbourne's public transport. Newman's assessment was scathing:

> Melbourne's public transport network as a whole struggles to offer a time-competitive alternative to car travel on almost any trip. Each public transport mode in Melbourne—trains, trams and buses—requires far-reaching innovations, in terms of operation and infrastructure, to offer premium standards of service such as those that help other cities perform better.
>
> —Peter Newman, *Most Liveable and Best Connected?*[31]

The government was worried: 2006 was an election year, and it appeared that public transport could actually become an election issue instead of remaining comfortably in the background. In response to the Newman report, it immediately announced the production of a 'Transport and Liveability Statement' for release in early 2006.

The result, released in May 2006, was *Meeting Our Transport Challenges*, or 'MOTC'. Like *Linking Melbourne*, MOTC was heavy with reannouncements and platitudes, but what the government hoped would make it different is the amount of money it promised for new projects. As indeed it did: but mostly on things that no-one had asked for and that were of dubious merit, such as a third track to Dandenong or the replacement of the Comeng train fleet. Here and there was a minor project that was undeniably useful, such as track duplication between Clifton Hill and Westgarth, and the creation of new orbital bus routes with increased frequencies. But it was the unasked-for projects that consumed the lion's share of the budget.

Of course, MOTC also included a large helping of road projects, and it was a telling feature that virtually all the road projects were budgeted for the next five years, while most of the public transport initiatives were not to be implemented until after 2010. A good example was the South Morang train extension, originally promised in 1999 only to be demoted in *Melbourne 2030* and then put on the never-never by Jim Betts in 2005. MOTC resuscitated the South Morang extension, but only for commencement after 2016—in time, perhaps, for the children of those to whom it was originally promised (and assuming MOTC would still be government policy by then!). Meanwhile, road projects costing more than ten times as much would be completed and ready by 2010, demonstrating that there was no real change in where the government's transport priorities lay.

As with *Melbourne 2030* and *Linking Melbourne*, the main value of MOTC to the government has been as a tool to deflect criticism. "The government has a 20-year transport vision in *Meeting Our Transport Challenges*" became the stock response to all questions about the failures of the public transport system or the ongoing bias toward roads. At the same time, the government has indicated it doesn't want any further responsibility for public transport, and has even demoted the '20% by 2020' mode share target to an "aspirational" goal.[32]

But MOTC also included two components whose nature and outcome were much more vague. The first—in fact the biggest budget item in all of MOTC—was the 'Meeting Our Transport Challenges Reserve' fund, which would be allocated $5.9 billion over ten years, for no specific purpose other than "to ensure that Victoria has the capacity to meet changing

[31] *Most Liveable and Best Connected?* A report to the Metropolitan Transport Forum, November 2005.
[32] "Trams, trains likely to stay private", *The Age*, 26 February 2007.

transport needs" and to "ensure that sufficient funds are set aside for…longer term projects". The other was an 'East-West link needs assessment' to investigate transport options for linking the east and west of Melbourne. These two mysterious items were in fact closely linked, and had nothing to do with any 'new thinking' on transport, as we see in the next section.

3.4 Eddington and the VTP: Back to the Future

> *Sir Humphrey*—At the moment we have a Magic Wand. It is called Trident. Nobody understands anything about it except that it will cost 15 billion pounds, which means that it must be *wonderful*. Magical. All we have to do is write a cheque and then we can all relax. But if people in the government start talking about it, do you know what will happen?
>
> *Bernard*—No.
>
> *Sir Humphrey*—In the end they will start *thinking* about it. They will come to realise the problems, the flaws in the reasoning. The nation will start to get worried. Agitation. Questions. Criticism. *Change*.
>
> *Bernard*—Change??
>
> *Sir Humphrey*—Change!
>
> —*Yes Prime Minister*[33]

Parkinson's Law of Triviality states that the consideration given to a proposal by decision makers is inversely proportional to the sum of money involved.[34] Few people are accustomed to dealing with nine or ten-figure sums in their daily lives, and so it is easy for the 'shock and awe' element in a gigantic price tag to forestall criticism and debate. The higher the price, the more the impression is created that the project must be worthwhile (even if it's never explained why), otherwise the proponents would not *dare* suggest anything so expensive.

This, at any rate, is what the road lobby and the transport bureaucracy were counting on to ensure political acceptance for the major recommendations of Sir Rod Eddington's *Investing in Transport* report. The result is the latest *Victorian Transport Plan* (VTP), released at the very end of 2008. Two things stand out in the VTP's proposals compared with previous plans: the vast price tags (at a time when financial markets have dried up), and their utter failure to address the real problems with our transport system.

Eddington's Predecessors

Even while it was still securing State and Federal Government approval for the Scoresby Freeway (now Eastlink) in the late 1990s, the road lobby was laying the groundwork for the next big road project on its wish list: a link between the Eastern and Tullamarine Freeways. This had been in the 1969 transport plan, but Premier Hamer had cancelled it in the 1970s. Now that 'the pendulum had swung around' in the road lobby's favour, it was time for its revival.

This was done in easy stages. At first, it was just a suggestion by Kennett Government MP Mark Birrell in the mid-1990s, immediately dismissed by Kennett as not being government policy. (Birrell would later retire from politics and become a consultant to the toll-road industry.) The road lobby generated further publicity about the problem of the Eastern Free-

[33] Antony Jay and Jonathan Lynn. *Yes Prime Minister: The Ministerial Broadcast*. Series 1 Episode 2, 1986.
[34] C. Northcote Parkinson. *Parkinson's Law, or the Pursuit of Progress*. John Murray, 1957.

way ‘dead-end’, until in 1999 the government commissioned Vicroads to undertake a feasibility study into a ‘tunnel’.

The study was not completed before the Kennett Government was voted out in 1999. The new Bracks Government oversaw the completion of the study, but initially was emphatic that it “does NOT endorse any of the concepts presented. Rather, we are initiating a broader transport and land use study (the Northern Central City Corridor Study) to develop an integrated, overall strategy.”[35]

This new study (commonly abbreviated to NCCCS) produced its draft report in 2003. Its conclusion was unsurprising to anyone with experience of how traffic moves around the inner north. The vast majority of traffic coming off the Eastern Freeway is headed for the city centre, with a smaller amount going north, and only 15% actually heading west. Accordingly, the NCCCS found that no case could be made for linking the Eastern and Tullamarine Freeways: this would simply shift the existing bottleneck a few blocks to the west, creating multiple new bottlenecks at all the northern approaches to the city.

The NCCCS draft report recommended transport needs in the area be met through sustainable transport and better traffic management. But a train line to Doncaster, which would be the single most effective measure in reducing traffic pressures on the Eastern Freeway, was ruled outside the scope of the study.

After the release of the draft report the NCCCS was shut down, and a final report was never produced. The study, in the road lobby’s view, had simply come to the wrong conclusion. By this stage, the builders of Eastlink could be relied on to help lobby for the new road, and keep up the political momentum. Having assured people at the approval stage that Eastlink would relieve rather than increase traffic levels, the road planners now changed their tune, scaring local communities with the message that Eastlink was going to dump tens of thousands of extra cars at the end of the Eastern Freeway and “something needs to be done”.

In 2005 the road lobby began anew, using the Melbourne City Council to float a reconfigured version of the Eastern–Tullamarine link under the title ‘East West Integrated Transport Proposal’. This new proposal was for a tunnel all the way from Collingwood through to the Western Ring Road in Deer Park. It also introduced the ‘shock and awe’ tactic of the gigantic price tag, costing the project at $10 billion.

At the time people wondered why an idea for a new road was being revived when the NCCCS had already found there was no case for it. This doubt extended even to the very consultant who was commissioned to produce the council’s report:

> Transport consultant William McDougall told *The Age* that building tunnels was the lowest of the city's transport priorities. He said his report to the council only advocated a tunnel after a brief from a senior town hall officer called for it.
>
> “My personal view is that we'd probably be better off not building a tunnel: I think the real key to solving congestion is to shift people from car to public transport,” he said.
>
> —*The Age*, 1 September 2005

Whatever Mr McDougall’s personal view, the expert had been overruled by the lobbyist. It only remained to find the ‘right’ expert who could be relied on to give the road lobby the answer it wanted.

[35] *Northern City Corridor Study*, ‘Tunnel Investigation’. Covering latter from Transport Minister Peter Batchelor, April 2001.

Forward to 1969

The 'East-West Link Needs Assessment' was announced in 2006 as part of *Meeting Our Transport Challenges*. The study task was given to Sir Rod Eddington, a former chief executive of Ansett Australia and British Airways, non-executive chairman of JPMorgan Australia, and a director of News Corporation, Rio Tinto and the Allco Finance Group.

While Eddington claimed no particular expertise on urban transport, it was apparent that he could claim some expertise in lobbying for big infrastructure projects. Eddington had recently delivered a report to the British Government urging increased spending on road and rail infrastructure and an expansion of airports. For the East-West Assessment, Eddington would be relying almost solely on the project proponents to provide the technical input, effectively loading the whole process in favour of the proposed projects.

The process underlying the Eddington Report, in other words, was almost exactly the same as that underlying the 1969 *Melbourne Transportation Plan*. It's therefore not surprising that it came up with similar recommendations. At its core was the big road proposal, essentially the same as the version promoted through the Melbourne City Council and itself dating back to 1969. But there were also a new version of the city rail loop, some hit-and-miss proposals for suburban rail, and a bunch of minor initiatives.

Perhaps the most curious feature the Eddington Report shared with the 1969 plan is that the most worthwhile recommendations were also the smallest ones, and they become more dubious the bigger they got. Without doubt the most valuable elements of the 1969 plan were the various small train and tram extensions in the suburbs (virtually none of which ever proceeded). Likewise, the best bits of the Eddington Report were in the fine print beyond the headlines: electrification to Sunbury, better tram and bus priority, and new freeway ramps to channel trucks onto the West Gate and off residential streets. Unfortunately, these nuggets of goodness didn't rescue the Eddington Report, any more than they rescued the 1969 plan before it.

Fundamentally, the Eddington Report (or *Investing in Transport*, to use its proper name) was an exercise in justifying the priorities of the State transport bureaucracy and the private-infrastructure lobby at the expense of the public interest. It's by no means a sin to make money by building transport infrastructure; but the infrastructure should be of the sort that people want, and that has a clear public benefit. An example would be those rail extensions to Rowville and Doncaster that were in the 1969 plan, and those to South Morang and Cranbourne East previously promised by the government, for which hundreds of thousands of Melburnians are still waiting.

Instead, we were given the same road tunnel that was found in 2003 to have no justification, but without the city exits that 85% of its potential traffic would be seeking to use. It has been pointed out that based on the figures in the report, the conventional benefit-cost ratio (BCR) of this tunnel is just 0.45[36]—meaning that it only generates sufficient benefits to cover 45% of its costs. By adding in some nebulous 'wider economic benefits', the BCR rises to 0.73, which still makes the tunnel a waste of money by any sane judgment. Only when Eddington added in another $6 billion of 'further benefits'—apparently made up on the spot by himself and not even endorsed by his consultants—does the road tunnel come close to breaking even!

Given these figures, to be having a debate on the merits of the road tunnel is rather like debating whether smoking is good for you. There are many more important debates to be had on the contents of the Eddington report. For example:

[36] P. Mees. "How should planners respond to the Eddington report?" *Australian Planner*, 2008.

- Why was a train line to Doncaster ruled out without *any* detailed analysis, which might have shown it had a lower net cost than the road tunnel?
- Why do we need to spend $8 billion on a second City Loop, when (as Section 2.5 showed) we're not even using the extra capacity we got from the first City Loop by operating it in the way it was intended? Will Melburnians really be willing to pay higher property rates or higher public transport fares (already the highest in Australia) in order to fund this?
- Why is it so important to develop the Tarneit area with brand new infrastructure—requiring yet another extension of the Urban Growth Boundary to give it a proper catchment—rather than develop the Rockbank to Melton corridor, which already has a train service in place?
- How will the proposed new non-electrified line through Tarneit be served, without drastically increasing the travel time for Geelong trains and denying future Tarneit residents a link to the Werribee district centre?

The rail tunnel proposal, in particular, needs much closer scrutiny. The Eddington Report actually acknowledged the 1969 decision to build the City Loop as a precedent, and goes so far as to note the doubling in capacity that came with it:

> Other ideas with much lower costs were favoured by some, but the Loop proposal stood out as a solution not just to the constraints at the time, but as a way to improve service, double capacity and shape the future of the city.
>
> —*Investing in Transport*, p.53

At the same time, the report claimed that the Loop is "approaching capacity". What it *didn't* say is that we are still running the same number of trains in peak hour as in 1964—before the Loop was built! As noted in Section 2.5, there is an alarming disconnect between what the capacity of our rail system *ought* to be and what present-day managers say it is. So before we are all asked to pay even higher fares to fund this tunnel, as Eddington recommended and the government has accepted, we'd better be sure it's actually needed, and not just another big infrastructure project designed to enrich merchant banks and the construction industry at public expense.

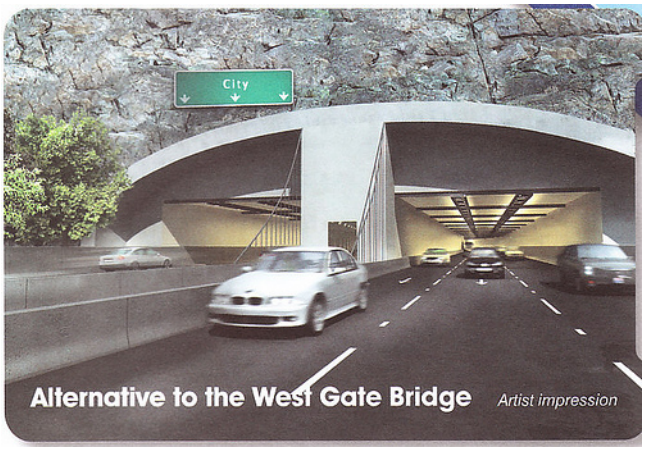
The real problem with the Eddington Report as a whole, though, is the way it assumed that public transport is doomed, and ignored everything the world has learned about urban transport since the 1960s. The 1969 Transportation Study imported American consultants whose car-centred ideology and techniques were to be discredited within a decade. The Eddington Report, likewise, repeated all the old road lobby myths about freeways and public transport: that freeways are good for the economy; that people who own cars won't use public transport; that public transport only works for CBD commuting; and so on. This is why Eddington, despite recommending $8 billion of expenditure on a new rail tunnel, also suggested that public transport will still only be used for 10% of motorised trips in 2031! How can such a continuing marginal role for public transport possibly justify that level of expenditure?

Finally, the report gave the same consideration to climate change and oil depletion as was given in 1969: that is to say, none at all. Eddington himself made the excuse that greenhouse emissions were outside his brief. As for the future of oil, the report's assumption that oil prices would fall back to US$50 a barrel has proved correct—for now—but only because we have fallen into a worldwide recession.

Return of the 'Missing Link'

The *Victorian Transport Plan* is the government's response to the Eddington report, and purports to also be the government's 'new vision' for transport in the whole of Melbourne. Worryingly, this new vision looks even more like the old vision from 1969. It proposes more than 130km of new motorways, which if ever built will give Melbourne more freeways per head of population than Los Angeles.[37]

As was expected, the VTP accepts most of the Eddington report's recommendations as Victorian government policy. When it was launched in December 2008, much was made of the inclusion of only a scaled-back version of the east-west road tunnel: connecting Geelong Road in Footscray with Dynon Road and Footscray Road in Docklands. However, the fine print of the plan states that the full east-west motorway has merely been 'deferred', not rejected. The Footscray tunnel is just Stage 1 of the larger project, which remains as much of a dangerous waste of money as ever.



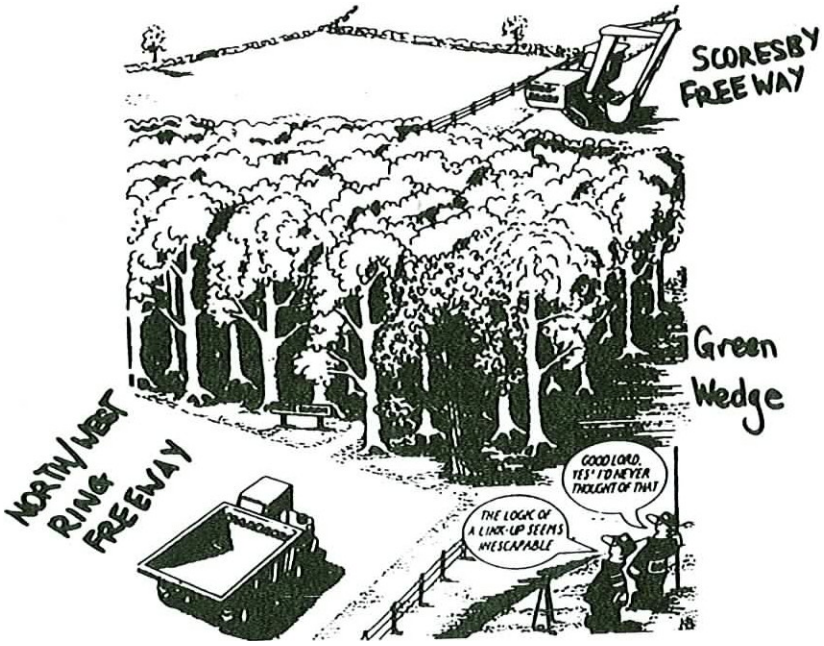
The East-West Tunnel is promoted in the VTP as a freight route for trucks to access the Port of Melbourne. So why has the artist shown private cars going to and from the city?

But the VTP also resurrects the so-called 'missing link' through the Yarra Valley 'Green Wedge' in Heidelberg and Bulleen. Plans for a ring road through the Yarra Valley have existed—and been vehemently opposed by local communities—ever since the 1969 transport plan proposed two north-south freeways in the area, the F18 through Heidelberg and the F7 through Eltham. But until now, governments have flatly denied having any intention to build such a road, despite progressing plans to build what is essentially a ring road with a hole in it. Even after giving approval for the construction of Eastlink, former Transport Minister Peter Batchelor said in Parliament:

> There is a very wrong suggestion that the government has a proposal to build a freeway through the Yarra Flats to link the Eastern Freeway with the northern metropolitan ring road. I put on the record that the government has no such proposal under consideration… It is not on our radar… There is no truth in the suggestion… I need to set the record straight once and for all, and these people will have no basis for making the suggestions in the future.
>
> —Transport Minister Peter Batchelor, October 2001[38]

[37] Existing motorways plus those planned in the VTP have a total length of 358km, for a population of 3.8 million in greater Melbourne. The County of Los Angeles has 885km of freeways (with only minor extensions planned) and a population of 10.4 million. This gives Melbourne 94km of motorway per 1 million people, compared with 85km in LA.

[38] Victorian *Hansard*, Legislative Assembly, 9 October 2001.



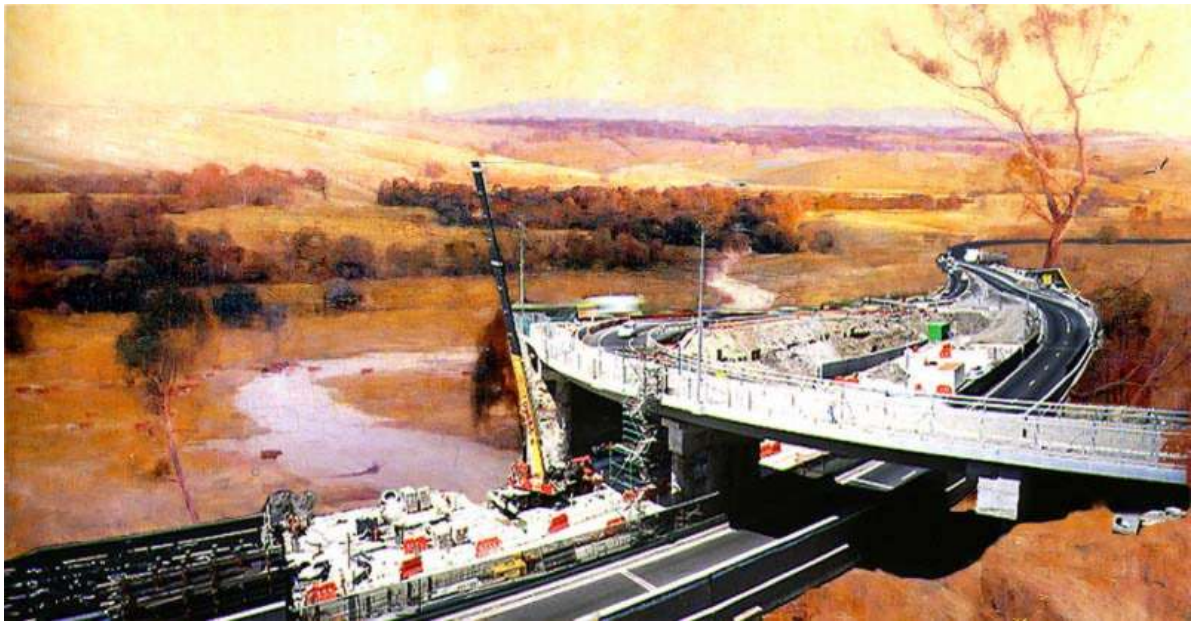
Wedge tactics: how the road lobby has made an unpopular North East Link 'inescapable'.

These assertions in 2001 were made in response to claims by the PTUA and others that construction of Eastlink would create pressure to build this more environmentally sensitive link to the north, and that this should have been considered in the environmental approval for Eastlink. Although this was dismissed as a conspiracy theory at the time, it has since proved correct: barely 6 months after Eastlink opened for traffic in June 2008, the Yarra Valley link that was "not on the government's radar" has become government policy!

Besides the contentious Yarra Valley link, the VTP proposes two other big motorways, one on the Mornington Peninsula and one in Melbourne's outer west. Both areas suffer from an appalling lack of public transport services, and consequent high car dependence. Under the VTP, they will continue to have no alternative.

It is some consolation that the on again, off again rail extensions to South Morang and Cranbourne East are now included in the plan. But we will not see them operating for at least five years, and their costs, even more than those of the road projects, strain one's sense of credibility. The South Morang project, for example, now proposes spending some $600 million on 3km of new track and 4km of duplication of existing track—over $80 million per kilometre. Perth's planners, meanwhile, have just completed a 70km train line to Mandurah for $12 million a kilometre, which included 2km of tunnelling and two underground stations at the city end.

Nor is there anything in the VTP to address the immediate problems with public transport. There is a slightly boosted re-announcement of the purchase of extra trains, which may help to relieve overcrowding, although some of these trains will be replacing existing trains instead of adding to the fleet. But the purchase of extra trams has been scaled back from what was announced in MOTC in 2006, and one of the four orbital SmartBus routes has been axed completely.



Arthur Streeton's artistic heirs may have something different to paint in a few years

Nothing is being done about the design faults that cause the train system to fail catastrophically in hot weather (even while Perth is able to continue running a full service on 40 degree days), and there are no initiatives to improve our system's poor reliability, which is a big factor in overcrowding. Lastly, there is nothing in the VTP for those who are unfortunate enough to live beyond the immediate reach of the train network—that is, the majority of Melburnians.

All in all, the government's latest transport plan offers no more of a solution than the ones that came before it. And to cap it off, new evidence in 2009 from the Commonwealth Grants Commission confirmed that of all Australian states, Victoria is one of the most generous spenders on roads and by far the most miserly on public transport.[39]

An alternative is desperately needed; one that puts passengers and their needs first, and draws on 'best practice' from successful systems around the world. And while boosted infrastructure must form a part of that alternative, it should not really be the primary focus. We already have plenty of infrastructure: more tracks than the Paris Metro, and the largest tram system outside Europe. The problem is our transport managers aren't using it effectively to deliver good service.

> That will-o'-the-wisp, the large-scale solution to a large-scale problem, which is so dear to governments, universities, and corporations, serves mostly to distract people from the small, private problems that they may, in fact, have the power to solve. The problems, if we describe them accurately, are all private and small.
>
> —Wendell Berry[40]

The next sections outline such an alternative: one that focuses on the 'private and small' problems of the actual transport user, and what kind of transport system is really needed to help people solve these problems.

[39] "Victoria Tops Bill as Country's Lowest Spender", *The Age*, 4 May 2009.
[40] Wendell Berry, "Word and Flesh", op. cit.

4 The Solution: Learning From Experience

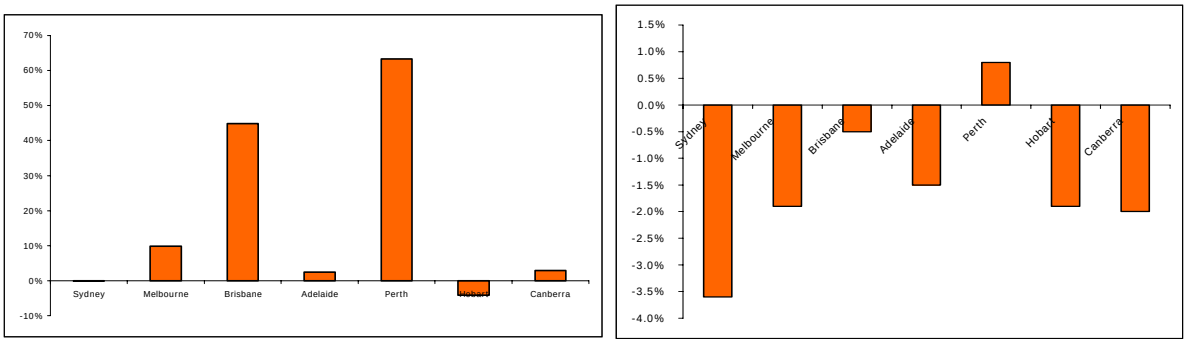
While Melbourne and many other Australian cities go on acting like it's still 1969, the rest of the world has been moving forward. Europe and East Asia's superior public transport systems are taken for granted, of course, but what is more surprising is the way many Canadian and even some US cities have been achieving public transport mode shares higher than Melbourne's, despite having less raw material to work with: fewer train lines, smaller budgets, lower population densities and fewer managers.

	Vancouver	**Toronto**	**Melbourne**
Population (2006 census)	2.1 million	4.8 million	3.6 million
Population density (persons/ha)	12	27	17
Number of rail lines	4	4	14
Annual budget for transport	$400 million	$1,100 million	$1,500 million
Typical fare for single 20km trip	$3.80	$2.75	$4.96
Public transport boardings in 2006	283 million	445 million	419 million
Share of journeys to work by PT	**16.5%**	**25%**	**13.9%**

Canadian cities have many geographical and cultural similarities to Melbourne. This does not however extend to the performance of their public transport systems.

Even Perth, with a much lower population density than Melbourne, has doubled the size of its suburban rail network in the last decade, and plans to do as much again. Patronage growth over the past 15 years has been greater in Perth than in any other Australian city—even with the recent growth in peak-hour train passengers in Melbourne. Perth is also the *only* Australian capital city to achieve growth in the proportion of work trips by public transport over this period (see below). If this is possible in Perth—on some measures the most spread-out and car-dependent city in Australia—we should be able to do even better in Melbourne.

The secret of these successful systems, according to those who manage and use them, is simply that they make a serious effort to compete with the car by focussing their effort on the *outcomes* that matter to passengers. This is made possible by an operational culture that puts the passenger first, rather than making excuses for why they can't.



Trends in public transport use for journeys to work, Australian capital cities, 1991 to 2006. Left: Percentage increase in PT trips. Right: Change in percentage mode share for PT.

> Our customer wishes to set off from a place of his [sic] own choosing, travel quickly, comfortably, cheaply and in safety to his destination, and arrive there at a time set by himself; nothing else will do.
>
> —H. Brandl, Zurich City Transport Authority[41]

The success of these systems provides an opportunity for us to learn from their experience, to improve public transport in Melbourne and Victoria in ways that matter. Given Melbourne's already generous, if imperfect, provision of infrastructure (we have more kilometres of rail track than almost any city in the world relative to population), we could have some of the best public transport in the world if we just take some hints on the right way to use it.

Good public transport has a number of key features: it is fast, frequent, clean, reliable, safe and cheap. American transport planner George Gray[42] put it another way, saying that the attributes of high quality public transport are SCARCE: Safety, Comfort, Accessibility, Reliability, Cost and Efficiency.

At the moment, Melbourne's public transport is the opposite of this: it's too often slow, infrequent, dirty, unreliable, expensive, and unsafe (especially after dark). Here's how to fix it.

4.1 A New Public Planning Authority

The first thing to notice about most cities with successful public transport (London, Zurich, Vancouver, Toronto and Madrid, to name a few) is that they all have autonomous public authorities that take a proactive role in planning public transport. These operate at arm's length from government, providing them with stability and a degree of independence from the electoral cycle, and are staffed by professionals who mostly use public transport themselves and view it from a passenger's perspective.

We actually do have such an autonomous, professional, and effective planning agency in Victoria: but it plans roads, not public transport. Currently an independent statutory corporation called Vicroads is empowered to plan and manage the road network at arm's length from government[43], has its own CEO and Advisory Board drawn from the wider community, has a substantial budget under the direct control of planners, and is staffed by competent professionals that take pride in their work and focus on outcomes for road users. In short, we need the equivalent of Vicroads for public transport!

What we currently have for public transport is an impenetrable maze of bureaucratic confusion across public and private sectors, whose *modus operandi* is to limit political damage to the government on the one hand, and to maximise the commercial advantages of private operators on the other. Neither has anything directly to do with what matters to passengers. As a result, issues that passengers find important but are of limited political or commercial value—like better vehicle maintenance, improved timetables, clean seats and friendly staff—always fall into the cracks between government and operator responsibilities and are ignored. These won't get fixed just by writing some extra clauses into a franchise contract: they require ongoing attention from planners and operators with pro-passenger attitudes.

The starting point for a passenger-oriented reform of the system must be to call off the current re-franchising process for trains and trams. The government can do this at no cost: it has

[41] H. Brandl (1990). *Measures to increase the demand for public transport: the example of Zurich*. p.132

[42] G E. Gray and L.E. Hoel (eds). *Public Transportation*. 2nd ed., Prentice-Hall, 1992. Chapter 22 (Perceptions of Public Transportation).

[43] As of late April 2009 the government has accepted 'in principle' the recommendations of a review of Vicroads' governance, and indicates it will transfer some of Vicroads' planning powers to the Department of Transport, and make Vicroads accountable to the Department rather than directly to the Minister. While this makes sense overall, it is clear that Vicroads will retain a strong 'collaborative' planning function under the new arrangements. It appears unlikely in itself to weaken the road lobby's dominance of transport policy in Victoria.

already retained the option of bringing the system back under public control when the current contracts expire in November 2009. It can then use the unspent portion of the $100 million budget for the re-tendering process to start up a new coordinating agency, modelled on successful examples in other cities, and subsequently transfer the staff and recurrent budget for public transport to the new agency. Finding effective and competent leadership for this new agency will be vital, and the search should commence as soon as possible.

The other main advantage of an effective planning agency is that it ensures services are coordinated when different operators are involved in providing them, as in Victoria. This is the most important ingredient in effective public transport, as discussed next.

4.2 Every 10 Minutes to Everywhere: a Metropolitan Network

The main feature of public transport systems that compete effectively with the car is 'go-anywhere-anytime' convenience. The key to this is operating the system as a genuine *network*: where from any location in suburbia one can catch a bus to the nearest railway station, get a train across town, then catch a tram or bus to the final destination—and wait no more than a few minutes at the interchange points.

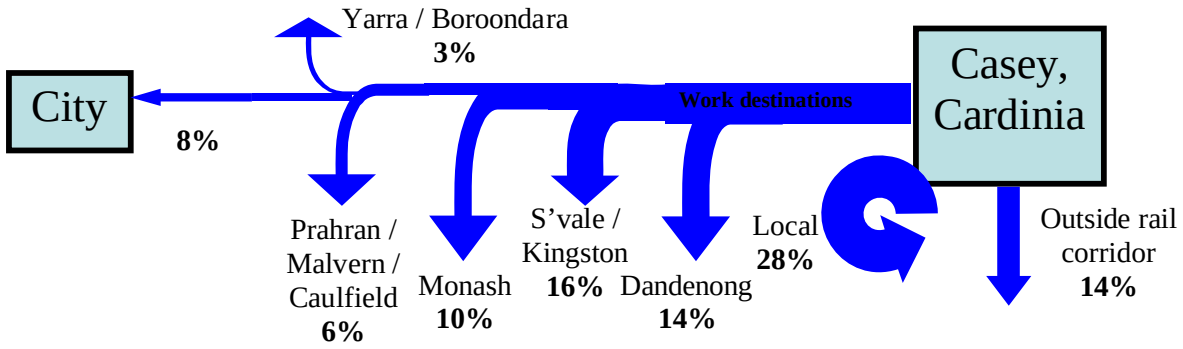
To the average public transport user in Melbourne, this sounds impossible. Yet most of the raw materials (and budget) for such a network already exist. Almost all municipalities in Melbourne are served by train lines, and there are literally hundreds of bus and tram routes covering the metropolitan area. The real problem is that there is no effective coordination between trains, trams and buses, and that the individual services are slow, infrequent, and (in the case of buses) follow convoluted routes that add unnecessarily to travel times.

The first step toward making Melbourne's public transport function as a network has to be to get buses to connect with trains. Providing a 'SmartBus' that delivers you to the station three minutes after a train leaves is scarcely better than providing no service at all.

We have lost count of the number of distinct government promises to coordinate buses and trains, all of them unfulfilled. Yet the solution involves nothing more than changes to bus timetables and, at worst, some additional buses here and there to ensure the bus frequency matches the train frequency. This is a clear case of bureaucratic inertia, not the technical barriers or inadequate budgets generally offered as excuses.

This one simple step of coordinating buses properly with trains will get us part of the way to a functional metropolitan network. The other steps required include:

- A handful of suburban rail extensions, to provide coverage to municipalities and regions cut off from the rail 'backbone'. These include East Doncaster, Rowville, Mernda and Clyde. 'Bus Rapid Transit' is a trendy but inferior alternative, rather like 'light rail' in the 1980s. On a whole-region scale, only standard rail has the capacity to bring about the big shifts in transport habits needed to fight climate change and face the end of cheap oil.



Employment destinations for the working population of the Casey–Cardinia region, from the 2006 census. Most workers travel to areas between Dandenong and the city, but our public transport planning focuses almost exclusively on the 8% travelling all the way to the CBD. If more workers from the outer suburbs were to use public transport, the vast majority would use the Dandenong train line from one suburban station to another, where there is still spare capacity even in peak hour. The real 'missing link' is the multimodal network to get people from rail stations to their ultimate destinations. Meanwhile, less than one in six journeys are outside the radial rail corridor and thus difficult to serve with existing rail infrastructure.

- Electrification of existing lines to Sunbury, Melton and Baxter that have come within the Urban Growth Boundary and are entitled to frequent suburban train services.
- Other minor train infrastructure works, such as duplication of remaining single-track sections to allow more frequent running, and gradual renewal of secondary infrastructure that has reached its use-by date.
- Improved train frequencies. All train services should immediately be brought up to the 15-minute standard now seen for eastern suburbs daytime services. This should then be progressively improved across the system to every 10 minutes during the day.
- Bus frequency and route improvements to drastically reduce journey times on the 'last mile' of public transport journeys, and journeys that cut across rail corridors. The model for this should be tram services: North Balwyn and Carrum Downs have similar populations and densities of around 20 people per hectare, yet one gets trams every 10 minutes and the other gets hourly buses. Bus routes should be straightened out into a 'SmartBus Plus' network feeding directly to activity centres and interchanges along arterial and main collector roads. Buses should run at the same frequency as trains, and continue doing so until midnight, seven days a week.
- Full coverage of the Melbourne urban area by the bus network, to ensure the vast majority of Melburnians are within walking distance of a bus stop. (This has recently improved, but most of the new routes are 'charity' services running once an hour, making them useless for most travellers.)
- Priority for buses and trams in the traffic stream, particularly at intersections where traffic lights are programmed to favour cars, not to move people. This generally requires measures to interrupt the light sequence so as to move an approaching bus or tram through as quickly as possible, as already used in many European cities.
- Minor tram route extensions to provide 'logical termini'. Due to historical competition between train and tram operators, many tram routes stop half a mile short of railway stations. These should be extended the last few hundred metres, at minimal cost,

to provide proper interchange. A small number of tram lines will also benefit from short extensions where they stop short of a logical terminus such as a shopping centre. (See Section 5 for an example.)

- Continued rollout of low-floor buses and trams, and platform tram stops, to improve access for people with disabilities, elderly people and those with prams and luggage. However, this must not come at the expense of the number of stops, since people's walking time is at least as important as travel time.
- Redesign of the current Nightrider service into a functional night bus network, covering all suburban rail corridors, tram routes and current SmartBus routes. Services to operate half-hourly, seven days a week after midnight when regular services do not.
- Better passenger information, including network maps, timetables at all stops, and staff to assist people finding their way. Every single public transport user is a new user to begin with, and also whenever they travel to a non-routine destination.

Section 5 discusses in more detail how these principles would apply in specific instances, focussing on the western suburbs of Melbourne. Although the focus is on the west, it is applicable with local modifications to any part of Melbourne.

Of course, running the system as a real multimodal network will be made much easier if it is *planned* as a network, with an effective planning authority as suggested above.

4.3 Regional and Rural Victoria

Regional transport in Victoria is currently a curate's egg, with reasonably good point-to-point train services between Melbourne and the regional centres of Geelong, Ballarat, Bendigo and the Latrobe Valley, but woeful levels of service almost everywhere else—including to get people to the railway stations in those large regional towns.

As well as supporting Victoria's extensive rural and tourism communities, regional Victoria has become increasingly important as a home for Victorians seeking space to live outside Melbourne, or who are shut out of the Melbourne housing market. Increasingly, it is also government policy to favour the decentralisation of work opportunities in Victoria beyond the Melbourne metropolis.

For this reason, great public transport in Victoria must be extended beyond those who live in Melbourne or who commute to Melbourne from a nearby regional city. More of the V/Line train services axed in the planning-for-decline era need restoring. Similarly, some older branch lines that have had tracks removed, but where formations still exist, are now worthy of restoration to serve growing numbers of tourists, 'seachange' and 'treechange' communities. Meanwhile, the ample fleet of V/Line and private coaches, which currently run around Victoria almost empty, should be better utilised to form a coordinated network of hourly services connecting all Victorian towns with a population of 5,000 or more.

This is no pipe dream: the settled regions of Victoria (excluding the remoter parts of the Mallee and High Country) support populations comparable to similar areas of a country like Sweden with good public transport provision, and are entitled to a similar level of public transport service to provide a buffer against the next rise in fuel prices.

This regional network should be supported by mini-networks of town bus services in the larger cities and towns, of a similar standard to those in Melbourne. A model for half-decent town buses is provided by some of the 'TrainLink' services in Melbourne, while some im-

provements in information provision can be seen with the new services in Ararat (even if these are far too infrequent to be truly useful).

To properly coordinate regional coach and town bus networks, localised planning authorities should be set up with appropriate budget and responsibilities for service planning, along the lines the PTUA has recently advocated for Geelong.[44]

4.4 Fares, Ticketing and Staff

Despite the abolition of Zone 3 in 2007, Melbourne continues to have some of the most expensive (and most rapidly increasing) public transport fares in Australia. Abolition of Zone 3 has also exaggerated the existing anomalies with fare boundaries, so that starting from (say) Box Hill, a journey to Camberwell now costs more than twice as much as a journey to Belgrave more than three times further away!

A fare system needs to be multimodal, easy to understand, bear some relation to the cost of provision, and be priced to compete with the car, not to maximise profits for private operators. Many successful cities operate zone-based schemes like ours, but with a larger number of zones and a much lower fare per zone. The problem with our Zone 3 was less its existence *per se*, than the exorbitantly high cost of the Zone 1/2/3 ticket required for a trip to the city. The PTUA favours a system of zones with boundaries set at a fixed distance from the CBD and with a much smaller fare increment from one zone to the next. Reasonable overlaps are required to avoid penalising short trips near zone boundaries.

Ticketing—the mechanism by which fares are paid—should not be costing us anywhere near the $100 million-plus a year it is costing us currently.[45] Amid all the bureaucratic fascination with smartcards, it appears to have been forgotten that a ticketing system is merely a revenue collection device; it does not in itself provide any useful service to passengers. It should therefore be provided at the minimum cost required to sustain itself.

The recommendations of the original *Met Ticketing Taskforce* back in 1991 are still relevant today. Produced in the wake of a botched introduction of scratch tickets, the report stressed the importance of staff. Whatever ticketing system is used, full staffing is required in any case to assist passengers, to minimise delays in the system (which reduce carrying capacity), and to ensure people actually pay their fares. As long as they are there, staff might as well also be selling tickets, or assisting passengers to pay fares by automated means.

Ticketing systems are particularly cost-effective and convenient for passengers when they encourage the use of periodical tickets. These require only a single transaction for the duration of the ticket, entitle the user to unlimited travel over this time, provide a substantial discount for regular users, and provide the operator with valuable advance revenue. In many European cities, periodical tickets are now promoted as an environmental measure. Meanwhile in Melbourne, we have been actively discouraging periodical tickets with our system of 'death by a thousand validations', the effective abolition of discounts on weekly tickets that aren't used on weekends, and the inability of schemes like Early Bird to cater for periodical ticket holders. (Not to mention the attempt to remove weekend all-zone travel entitlements, defeated only after PTUA lobbying in 2008.)

The gross cost of returning conductors to trams and staff to all railway stations has been estimated as about $30 million a year *less* than what Myki is costing us.[46] The net cost—after

[44] PTUA. *A regional public transport authority for Greater Geelong*, 2008. Available from PTUA website.
[45] The Victorian Auditor-General revealed in early 2008 that the full cost of the government's Myki contract is $1.13 billion over 10 years, equivalent to $113 million a year until at least 2015.
[46] PTUA website: www.ptua.org.au/myths/smartcard.shtml.

allowing for reduced fare evasion and fewer ticket inspectors—is, conservatively, less than a quarter the cost of Myki. With the balance, we could overhaul Metcard to extend its life and remove the more obvious flaws (such as requiring revalidation of already valid tickets on trams, which does nothing to prevent fare evasion), and spend the rest on actual service improvements.

Just as an example, the PTUA has estimated that the cost difference between Myki and our preferred staff-based approach over 10 years would buy us a train line to Doncaster, based on the cost estimates for the Eastlink tunnels. Despite Eddington's dismissal of this train line, it would appear to have clear benefits over Myki, given that a ticketing system doesn't carry any passengers!

4.5 Walking and Cycling

The most sustainable transport modes are of course walking and cycling, which produce no pollution or greenhouse emissions, deplete no scarce fuel resources, rarely injure anyone, take up virtually no space, and keep people fit into the bargain. And of course every public transport user is also a pedestrian.

Recent rises in fuel prices have seen a substantial shift toward walking and cycling, a trend that is likely to continue with the economic downturn. But walking and cycling in Melbourne and regional cities is hampered by hostile road environments, with some of the highest urban speed limits in the world and traffic management systems that favour cars and treat pedestrians as second-rate human beings.

Speed limit reductions and traffic calming initiatives not only enhance the liveability of urban environments, but also have undeniable safety benefits. The chance of a pedestrian being killed in a collision with a car is close to 100% at 60kph and nearly zero at 30kph, so reductions within this speed range really make a difference. A five-year study in Oakland, California, found that children living within one block of a speed hump were 50% less likely to be injured by a car than in neighbourhoods that lacked humps.[47]

Measures that are needed to encourage walking and cycling include:

- Continued rollout of lower speed limits and other traffic-calming measures in residential and commercial districts, including the CBD.
- More intelligent operation of traffic lights, with shorter phases to minimise waiting time for pedestrians.
- Separate bike lanes on roads that continue to have speed limits in excess of 50kph. These could be of the 'Copenhagen' style now seen on Swanston Street in Carlton.
- Review of the 'Principal Bicycle Network' of bike lanes and paths, to improve connections with railway stations.
- Bicycle infrastructure funding sufficient to complete the principal network within five years (rather than the 2% a year average that has applied since the creation of the network in 1991).
- Retaining free carriage of bicycles on trains, in designated areas in peak hour.

[47] J.M. Tester et al. "A Matched Case-Control Study Evaluating the Effectiveness of Speed Humps in Reducing Child Pedestrian Injuries." *American Journal of Public Health*, vol. 94, no. 4, April 2004.

- Investigation of measures to allow bikes to be carried on the outside of buses and trams, as is now done in 35 cities in the USA, as well as some Canadian and European cities.

4.6 Freight Transport

Freight is now the standard justification for building motorways, and so any sustainable transport policy needs to state how the increasing volumes of freight are to be moved around and between our cities, without destroying the climate and rapidly depleting the world's oil.

The most obvious way to make freight transport more sustainable is to shift as much of it as possible to rail. Rail freight has a fraction of the energy use and greenhouse emissions of road freight, and does not contribute to road congestion or crashes. It has been estimated that just 10 additional Melbourne–Sydney freight trains per day in each direction would suffice to take every truck off the Hume Highway.[48]

Of course, much of our freight task (particularly within urban areas) is unable to be shifted to rail without a radical change in the way we provide infrastructure. But policies that respond to this by tilting the playing field in favour of road freight—chiefly by imposing disproportionate user charges for rail relative to road, while subsidising the costs imposed by trucks on the road system—only serve to encourage waste in the road freight industry. A survey by the Port of Melbourne Corporation in 2004 found that trucks using the port had an average capacity of 2.12 TEUs, but had an average loading of just 1.05 TEUs.[49] In other words, the average truck using the port is less than half full. As the Corporation themselves state:

> There are significant opportunities to reduce the number of truck trips required to handle the existing container movement task to and from the port.... [However,] improving the utilisation of trucks is [currently] not a high priority since the stevedores do not bear the costs of most road truck empty running, nor the congestion additional movements cause.
>
> —Port of Melbourne Corporation[50]

As a result of distorted policy settings, even much freight that was once carried by rail is now carried by road instead. Until the 1990s, freight trains were used to carry car parts between the Ford factories at Broadmeadows and Geelong, both of which are rail connected. But once the State government spent $270 million widening the Geelong Road, Ford switched to using B-double trucks instead. Similarly in January 2007, a privately operated rail freight shuttle service between Altona North and Port Melbourne was forced to close, citing the inability to compete with State and Federal Government-subsidised road freight.

Victoria has also spent the last 20 years actively creating a significant barrier to freight movement by rail in the name of gauge 'standardisation'. Where once Victoria had a uniform rail gauge, there are now breaks of gauge scattered throughout the network, making it all but impossible to move freight across the state by rail other than on a few designated routes. In the long term, this will only be remedied by completing the conversion of the entire Victorian network to one uniform gauge—most likely the Standard Gauge used for interstate rail traffic. Unlike most of the initiatives we propose, this will likely take at least 20 years to accomplish, particularly as the metropolitan network is part of the wider system and

[48] This estimate is based on 3,000 daily Hume Highway truck movements, with one freight train replacing 150 trucks. See "The Road to a Low Pollution Future: Rail," http://www.abc.net.au/news/stories/2008/11/12/2417209.htm.
[49] Port of Melbourne Corporation. Submission to the VCEC Enquiry into Managing Transport Congestion, 2005. A 'TEU is a 'twenty-foot equivalent unit', commonly used to measure freight volumes.
[50] Ibid.

will ultimately require conversion as well. But this must not be taken as cause to postpone the issue into the indefinite future, as has been the government's attitude to date.

To cater appropriately for the road freight that cannot be shifted to rail and cannot be further reduced through business efficiencies, one has to understand the true nature of the problem. Trucks currently form 10% of traffic on Melbourne's roads, and most road freight moves outside peak hours.[51] If freight were really the primary justification for building roads, then planners would be building small, inexpensive roads and dedicating them exclusively to freight vehicles. They would not be building big roads to encourage further growth in private car traffic, that holds up freight. Yet this is what the government's 'missing link' and other motorway projects will ultimately do!

Vicroads' traffic monitoring shows there is a trend for freight vehicles to move off arterial roads and onto existing freeways. This trend should be encouraged, through 'carrots' such as dedicating individual freeway lanes to freight vehicles (or to trucks and buses, as a single freeway lane will generally have capacity for both), and where necessary through 'sticks' such as truck bans in residential areas.

4.7 The Road Network

Even with a huge shift of passenger trips to public transport, walking and cycling, and of freight from road to rail, cars and trucks will not disappear from Victoria's roads. On this point the road lobby and the PTUA agree: that the complete *elimination* of the motor car is both unlikely and unnecessary. In a world of peak oil and carbon pricing, cars may be more costly to operate and used much more sparingly, and may not even run on petrol, but people will own them and use them nonetheless. Similar statements apply to trucks and to commercial vehicles.

So even in a world of first-rate sustainable transport, there will still be a role for road planners and builders. Arterial road networks will grow with new suburbs in Melbourne and the regional cities, and local councils will need to maintain the local streets. What we will not need to do, on the other hand, is destroy our remaining river and creek valleys and local parks with big freeways or 'bypass roads'.

The kind of projects that will occupy road planners in the future are those that improve the efficiency and safety of road travel without encouraging additional traffic or sacrificing local amenity. An excellent project of this type, which could start immediately, is the progressive elimination of railway level crossings in Melbourne and Victoria.

Melbourne actually had a programme to eliminate its level crossings in the 1960s, as did Sydney. But whereas Sydney's programme proceeded to completion (there are only a handful of level crossings in Sydney now, and those are on minor branch lines), Melbourne's programme came to an abrupt halt with the release of the 1969 *Transportation Plan*. It has been conjectured, based on the historical evidence, that the Country Roads Board used the level crossing money to fund the Eastern Freeway instead.

The programme of level crossing elimination is long overdue for revival. Even at a conservative $40 million per crossing, the grade-separation of 150 urban and rural crossings is a far better use for $6 billion than a 'missing link' motorway. Of course, some ways of grade-separating crossings are better than others: the lowering of the rail line (as at Elsternwick in the 1960s or Boronia in the 1990s) is far more sensitive to local amenity than the elevation of the road (as at Sunshine or Oakleigh).

[51] Vicroads. *Traffic System Performance Monitoring 2005-06*.

4.8 Planning for Sustainability

Lastly, something must be said on the subject of urban planning. It is time to definitively reject the urban mythology from the 1960s that says public transport requires high-density urban development in order to be viable. Melbourne is already a more dense city than most of the public-transport-hostile cities of the USA, and it is a good deal more dense than many cities that have succeeded with better public transport (such as Vancouver) or that are developing high-quality public transport networks (such as Perth).

We can actually learn a lot from Vancouver in how to do urban planning in a way that reconciles the interests of local communities, architects, 'new urbanists' and transport managers. Vancouver is indeed encouraging the sensitive development of medium and high-density neighbourhoods, but on closer inspection it turns out that (being North Americans) their idea of 'medium density' looks like traditional Melbourne house blocks, while their idea of 'high density' is closer to what we call medium density in Melbourne.

The more important lesson from Vancouver is about the *process* that led to their Liveable Region Strategy. Rather than being a top-down process led by bureaucrats, it was steered by a committee made up of government, local council and community representatives. This committee involved councils and community groups as well as government departments in every step of the process, and all these bodies—including the road agency—ultimately agreed to the final plan. So it resembled at least the initial stages of the 'Metropolitan Strategy' consultations in 2001, but *as though the views expressed really mattered*.

By all measures this approach to planning in Vancouver has been a runaway success. Vancouver is now the only city in Canada (and perhaps even the world) where the average time spent travelling to work has *declined* over the last 15 years, despite sharing with Melbourne a high rate of population increase.[52] And yet Vancouver is the only Canadian city that has built no major new roads in that time. They have also increased the share of people travelling by public transport, and the share of people walking to work. In short, they have achieved every standard 'sustainable urban planning' objective that has eluded most of the world's other cities. It is perhaps surprising that this resounding success is not better known.

The lesson here is that if our planning bureaucracy had the public-spiritedness to relinquish a degree of control over the *Melbourne 2030* plan, and give the community some ownership over the process, they would likely find that sustainable planning outcomes (as distinct from simply giving developers *carte blanche* to build whatever they want, wherever they want) actually have strong and broad community support, and that something approaching consensus on these outcomes is achievable.

> Victoria has rarely done the transport planning process very well, and a comparison with the better overseas models suggests that we keep our planning too far from continuous public scrutiny and too close to our political processes.
>
> —Road engineer Max Lay, *Planning News*, February 2009

4.9 What Will It All Cost?

Having outlined a sustainable way forward out of our transport crisis, we must turn to the budget. After all, public transport in Australia has for decades been plagued with operating deficits, and critics will demand to know why this would not simply continue.

[52] Statistics Canada. Census data, 1992 to 2005. As reported in submission to Infrastructure Australia by Paul Mees, 2008. www.infrastructureaustralia.gov.au/public_submissions/published/.

The tables at the end of this chapter outline the cost estimates for our proposals, in direct comparison with what the Victorian Transport Plan is proposing. In this section, we explain why a sustainable transport solution actually works out cheaper for the taxpayer than business as usual.

Operating Expenditure

Compared with roads, public transport systems require a large investment in people and publicly-funded vehicles to operate the system. For many years governments have been allergic to this kind of 'operating expenditure' and have been unable to see public transport as anything other than a money pit. Of course, roads also require the expenditure of large sums of money for which the government gets no direct return: but this is mostly one-off capital expenditure, and so (the argument goes) doesn't keep reappearing in the budget year after year.

But as we know, when money is spent to build a new road, that's never the end of the matter. As discussed in Section 2.1, a car-dependent transport system requires governments to keep spending more and more money on roads every year just to mark time in the face of chronic congestion. New motorways fill up with new traffic, and this creates a vicious cycle as increased traffic leads to pressure for more road space, leading to yet more traffic! We can see this playing out today on the Monash Freeway and Western Ring Road. No sooner are more lanes added than they fill up again.

Ultimately, $1000 of expenditure is $1000 of expenditure, whether it's used to buy a load of concrete and bitumen or to employ someone to drive a train. Investment in public transport services creates more jobs than spending the same amount on roads (where most of the work is done by machines). This is especially the case when the rolling stock and vehicles are manufactured locally, as our trains and trams were in Melbourne until the system was privatised, and the new operators specified imported (and inferior) rolling stock instead.

A report by Environment Victoria in 2009 indicates that by manufacturing 50% of the Victorian Transport Plan's envisaged new rolling stock in Victoria, over 9,000 'green jobs' would be created.[53] This local-content policy would be consistent with the US and China, which require 60% and 70% local content respectively.

Expansion of public transport services has one other key virtue cost-wise: the people attracted are fare-paying passengers, and this generates additional ongoing revenue to offset the cost of providing the service. Successful public transport systems, whether in 'Old World' cities like Vienna or 'New World' cities like Toronto, generate sufficient patronage to recover at least 80% of their operating costs, often despite having relatively cheap fares.

In Melbourne, cost recovery is poor at around 30% to 40%, even with fares among the highest in the world. This stems from the fact that we have done virtually nothing to encourage patronage outside peak hours, and because a relatively high proportion of patrons are 'captive market' passengers on concession fares. The Victorian Transport Plan will do nothing to address these problems, and by spending billions of dollars on infrastructure that will only be effectively used in peak hour, it promises to make public transport cost recovery even *worse* than it is now.

Our overseas examples show that better services outside peak times have a multiplier effect: they generate revenue without additional outlay on infrastructure, thus improving cost recovery. Thus, when the PTUA back in 1991 convinced the government to increase off-peak train frequencies on the Sandringham line from 20 to 15 minutes, this generated a 40% increase in

[53] *Victoria—the Green Jobs State: Seizing the Opportunities*. Environment Victoria, 2009.

revenue, which was more than enough to pay for the extra services. Similarly, we can expect the kind of across-the-board increase we propose to result in the high off-peak patronage and revenue levels already seen in European and Canadian cities. Vancouver, for example, spends less than half as much per person subsidising its road and public transport systems,[54] and yet charges lower fares than we do. Obviously it would be pointless to suggest boosting services if we didn't expect more people to use them!

But the entire debate about transport costs has also undergone a monumental shift with the release of the Victorian Transport Plan. Suddenly it has become acceptable to sign up to multi-billion dollar projects, like the Yarra Valley 'missing link' and the Mornington Peninsula Freeway, even where the identifiable benefits fail to exceed the costs.

This shifts the entire playing field when it comes to justifying the alternative to the VTP. Suppose we did boost public transport in all places and at all times to levels that made the new motorways unnecessary, and let's be really pessimistic and suppose this would cost a huge $1,000 million a year *in addition* to the large amounts we spend on transport already. Then we could do this for the next 25 years and *still* have only spent two-thirds of the VTP's $38 billion budget!

Coming back to reality, the main area where our 'Every 10 Minutes' proposal will definitely require large additional operating expenditure is in bus services. These are so woefully inadequate at present that to upgrade to the decent levels seen elsewhere will require a larger bus fleet and many additional drivers.

However we have also calculated that, assuming only that 20% of people take one return journey by public transport each day, a comprehensive network of bus services in almost any part of greater Melbourne will break even, raising enough income in fares to offset the cost of buses, drivers and fuel.[55] The government's 20% by 2020 target should not be regarded as just a feel-good number: it is also our guarantee of economic viability for a first-rate public transport system. And overseas experience shows it is readily achievable.

Capital Expenditure

This leaves us with the capital cost of our proposed train and tram extensions. The problem here is that the VTP presents grossly inflated figures for projects such as the Sunbury, South Morang and Cranbourne East extensions. This stems from the apparent inability of the Victorian public transport bureaucracy to control the costs of infrastructure projects, so that for example a straightforward $30 million rail electrification to Craigieburn blows out by 200 per cent to $100 million—and then requires *another* $30 million to be spent two years later! Such mismanagement stems, we believe, from a lack of rail project experience. After all, Victoria has built no significant new train lines since the Glen Waverley line in 1930, and so the experienced rail project managers all reside elsewhere—in Perth, for example.

In December 2007 Perth, with competent managers in charge, completed a new 70km train line to Mandurah, on time and on budget, at a cost of some $12 million per kilometre, including associated roadworks and 2km of underground tunnels at the city end. This compares with $13 million per kilometre to electrify the *existing* track to Craigieburn in Melbourne, completed three years late, with no tunnels or complicated roadworks and minimal land acquisition.

[54] In 2005, the budget for roads and public transport in Vancouver was equivalent to $180 per resident. The equivalent figure for Melbourne was $430 per resident.

[55] The calculation can be found at www.ptua.org.au/myths/density.shtml (see the Technical Appendix). The exceptions to the general rule are the more remote parts of the Mornington Peninsula and the Dandenongs where population densities are lower, but these are a small portion of the total and warrant a small subsidy on the basis of social inclusion.

An important consequence of the government developing a positive attitude to public transport will be to attract competent rail planners and project managers from elsewhere (many of whom left Melbourne originally because they were discouraged by the bleak environment). This will have clear flow-on benefits for our capability to build affordable rail infrastructure. When our proposed rail extensions are costed using competent Perth benchmarks rather than inflated Melbourne costings, they can be done for a fraction of the cost of just one motorway project from the Victorian Transport Plan. A public transport-led recovery is not just sustainable and desirable, but also affordable.

4.10 Summary

Melbourne and Victoria can have great public transport if we learn from 'world's best practice', rather than keep repeating the mistakes of the past.

We should start by creating the kind of competent passenger-focussed planning authority that most other successful cities already have to manage public transport as a multimodal network. This authority would go to work fixing the deficiencies in our system, to turn it into a real network that goes from anywhere to anywhere, and is fast, frequent, clean, reliable, safe and cheap—while also providing good value-for-money for the taxpayer.

This would be supported by superior walking and cycling environments, a better deal for regional and rural Victoria, and measures to put freight on a sustainable footing—for some a shift to rail, for the rest measures to accommodate it more efficiently on the existing freeway network. The road network itself would continue to be developed, given that people will still want to own cars even if they're used less. Lastly, a community-led approach to urban planning such as in Vancouver provides a more palatable alternative to the top-down approach that has made *Melbourne 2030* so contentious and marginalised the public transport aspirations of the original community forums.

> I would like for us to invest in mass transit. Because potentially that's energy efficient and I think a lot more people are open now to thinking regionally in terms of how we plan our transportation infrastructure. The days where we're just building sprawl forever? Those days are over. I think that Republicans, Democrats… everybody recognizes that that's not a smart way to design communities. So we should be using this money to help spur this kind of innovative thinking when it comes to transportation. That'll make a big difference.
>
> —US President Barack Obama, 10 February 2009

Indicative costings: VTP estimates and PTUA proposals

Capital projects			
Victorian Transport Plan proposals		**PTUA proposals (Perth benchmark costs)**	
Project	**Cost ($m)**	**Project**	**Cost ($m)**
East West Tunnel Stage 1	2,800		
East West Tunnel Stage 2	2,200		
East West Tunnel Stage 3	5,500		
North East Link	6,000	East Doncaster rail extension	1,000
Outer Ring Road	3,000	Rowville rail extension	300
Metro rail tunnel (Stage 1)	4,900	Airport rail extension	150
Tarneit Link	1,500	Werribee–Sunshine spur line	250
South Morang rail extension	650	Mernda rail extension	80
Cranbourne East rail extension	200	Clyde rail extension	80
Sunbury electrification	270	Sunbury electrify + upgrade	150
Melton rail upgrade	1,300	Bacchus Marsh dup + electrify	320
Peninsula Link	750	Mornington dup + electrify	240
DART upgrade	360	Other track duplications	250
New stations	220	New stations	200
Dingley Freeway	80	Knox City tram extension	50
Truck Action Plan Stage 2	200	East Keilor tram extension	40
Hoddle Street motorway	1,000	Burke Road tram corridor	60
‘Green Motoring’ initiatives	70	Tram gap-filling programme	140
Level crossing elimination	440	Level crossing elimination	1,000
Expansion of metro bus fleet	500	Expansion of metro bus fleet	2,000
Regional rail improvements	260	Regional rail improvements	400
Regional airports	20	Regional bus purchases	300
Tram and bus priority	60	Tram and bus priority	60
Cycling package	100	Cycling and walking package	500
Miscellaneous road works	3,200	Regional road + bridge repairs	2,000
Rail gauge standardisation	340	Rail gauge standardisation	5,000
Land acquisition for motorways	100	Reinstate regional train lines	1,500
Total	**36,020**	**Total**	**16,070**

Annual operating budget			
VTP 'business as usual' scenario		**PTUA 'best practice' scenario**	
Budget item	**Cost ($m)**	**Budget item**	**Cost ($m)**
PT operating subsidy	1,300	PT operating subsidy	1,000
Rolling stock renewal	210	Rolling stock renewal	120
		Additional train services	500
		Additional bus services	800
		Additional revenue offset	-600
Myki ticketing	110	Conductors and station staff	80
Road maintenance	1,000	Road maintenance	700
Total	**2,620**	**Total**	**2,600**

Notes on costings

- For brevity, elements of the VTP are omitted where they are 'Existing projects' or where their basic concept and budget is not contested by the PTUA. These non-contested projects include the portion of the 'Regional Rail Link' project between Footscray and Southern Cross, Stage 1 of the Truck Action Plan, and the rollout of tram platform stops (with efficiency measures to speed this up—see Chapter 5).
- 'East West Tunnel Stage 3' is the original Eastern–Tullamarine Freeway link. While it is not included in the VTP committed projects, it is foreshadowed in the official response to the Eddington Report in Appendix B of the VTP. The costing is taken from the Eddington Report.
- The Outer Ring Road and Hoddle Street projects are likewise foreshadowed but not costed in the VTP. Costings for these projects are estimates based on recent road construction costs.
- Sunbury electrification includes cost of rebuilding stations, and of relocating rail yards outside Sunbury township. Other rail extensions include cost of new stations.
- 'Other track duplications' includes Keon Park to Epping, Gowrie to Upfield, Greensborough to Hurstbridge, Mooroolbark to Lilydale, Ferntree Gully to Belgrave, Dandenong to Cranbourne, and sections of the line through Altona.
- 'New stations' includes stations and bus interchanges at the following locations (only the last four are included in the VTP):
    - Newport West (Maddox Rd)
    - Patullos (Patullos Rd, Roxburgh Park)
    - Campbellfield (Camp Rd)
    - Eltham North (Allendale Rd)
    - Cave Hill (Mooroolbark Rd)
    - Southland (Bay Rd)
    - Investigate reconfiguration to provide Alamein line station at Toorak Rd
    - Narre Warren (relocated underneath Fountain Gate shopping centre)
    - Lynbrook (Aylmer Rd)
    - Pakenham Lakes (Cardinia Rd)
    - Williams Landing (Palmers Rd, Hoppers Crossing)
    - Caroline Springs (Christies Rd)
- 'Burke Road tram corridor' involves extending the existing track along Burke Rd to form a completed north-south route linking Ivanhoe and Caulfield railway stations.

- ‘Tram gap-filling programme’ includes the following small projects to create logical termini for tram routes:
    - Route 48 from North Balwyn to Doncaster Shoppingtown
    - Route 109 from present Box Hill terminus to railway station
    - Route 8 from Toorak to Hartwell
    - Route 16 (formerly 69) from Kew Cotham Rd to Kew Junction
    - Route 3 from East Malvern to Chadstone shopping centre
    - Route 67 to Carnegie railway station
    - Route 5 to Darling railway station
    - Route 6 from Glen Iris to Ashburton railway station
    - Route 112 from West Preston to Reservoir railway station
    - Review of Melbourne University tram shunting arrangements
- ‘Regional rail improvements’ proposed by the PTUA include restoration of passenger rail services on existing freight lines from Ararat to Portland, Ararat to Horsham, Shepparton to Cobram and Toolamba to Echuca. Also includes standardisation and restoration from Geelong to Mildura via Ballarat, and Maryborough to Castlemaine.
- ‘Reinstate regional rail lines’ includes consideration of restoring the following closed branch lines to cater for tourists, ‘seachange’ and ‘treechange’ communities: South Geelong to Queenscliff, Warrnambool to Port Fairy, Woodend to Daylesford, Castlemaine to Maldon, Springhurst to Rutherglen, Wangaratta to Bright, Bairnsdale to Orbost, and Clyde to Leongatha and/or Wonthaggi. Any one of these projects has as much to justify it as a freeway down the Mornington Peninsula.
- Tram and bus priority has the same budget under PTUA proposals as under the VTP, but the programme would be revised to emphasise traffic signal ‘software’ changes and improved sensor infrastructure over less effective road infrastructure changes.
- The PT operating subsidy is the estimated net cost to run the current level of services. It includes management expenditure, but excludes costs that are recovered from fare revenue. Under business as usual, it is assumed that franchising continues as presently envisaged by the State Government. The PTUA estimate is based on Auditor-General figures for pre-1999 subsidies, adjusted for inflation, patronage growth and (relatively minor) increases in service since 1999.
- Rolling stock purchases (metro and regional) are considered under the operating budget as an annualised expenditure. Under our proposals, older rolling stock would not be retired while it is still serviceable, but would be refurbished to extend its life, following the practice in cities such as Toronto, London and Zurich.
- ‘Additional revenue offset’ is an estimate of the additional revenue from achieving the government’s 20% by 2020 mode share target. It is a very conservative estimate for the patronage and revenue actually to be gained from adopting world’s best practice, provided simply to illustrate that the service increases are affordable.
- Road maintenance under business as usual includes costs to maintain new roads constructed under the VTP, and business-as-usual estimates of road traffic growth.

5 A Case Study: Melbourne's West

If freeways were the key to people's mobility and well-being, then the western suburbs would already be the most liveable in Melbourne. The State Government has built more freeways in the West than in any other region of the city; these now include the West Gate Freeway, the Princes Freeway, the Western Ring Road, the Tullamarine Freeway, the Calder Freeway and the Deer Park Bypass. In fact, a few minutes with a street directory shows that within the urban area of the western suburbs there is no point more than 5km from a freeway.

On the other hand, public transport provision has always favoured the eastern suburbs, with the West treated as the poor cousin. Outside peak hour, trains to the eastern suburbs run every 15 minutes, while those to the west run every 20. Some western suburbs lines don't run better than this even in peak hour. Of Melbourne's 25 tram routes, only three will be found west of Moonee Ponds Creek. Equality is only to be found in bus services, which run to the same low standard everywhere.

The outcome of this unbalanced treatment of the West is obvious. Despite all the freeways built in the region in recent decades, the west suffers from some of the worst traffic in Melbourne. The West Gate Bridge is a congestion bottleneck. Melbourne's West is an object lesson in how congestion depends on the quality of the alternatives to car travel: it is in the west, more than anywhere else in Melbourne, that people are forced onto congested roads by the lack of adequate train and bus services.

The Eddington Report brought new attention to the transport problems of the west. But simply adding to the west's supply of roads won't address the cause of congestion, nor does it make sense in a world of diminishing oil supplies and under the threat of dangerous climate change. We would just end up with another congested 'alternative' road parallel to the congested West Gate Bridge, in other words a situation no different from that today, just with more people stuck in traffic congestion. Nor does an underground rail tunnel from Footscray to Caulfield actually address the problems with inadequate train services, that even the bureaucrats say are due to track constraints further out in the suburbs.

Solving the transport problems in the West means directing attention to the need for more frequent and faster train services, and a proper network of feeder buses to support it. This is the alternative to the West Gate Bridge we really need.

5.1 Applying the 'Every 10 Minutes' Principles

In Section 4.2 we listed a series of 'Every 10 Minutes To Everywhere' principles that underlie the success of public transport networks in cities from Aalborg to Zurich. Here's how they might apply to Melbourne's western suburbs.

The alternative to the West Gate Bridge: trains that work

Amid all the hyperbole in the Eddington Report and the Victorian Transport Plan about needing "an alternative to the West Gate Bridge", none of the highly-paid managers and consultants have bothered to compare the flow of people and goods across the Bridge with that on the public transport routes that run in parallel with it.

At a peak of some 7500 cars per hour in each direction and 1.15 people per vehicle, the Bridge's entire passenger transport task is equivalent to that of one modest train line. To put this in perspective, the cancellation of 8 peak hour trains from the western suburbs is equiva-

lent to closing down the West Gate Bridge for an hour. The former occurs with annoying regularity and rarely leads to any corrective action. The latter, when it does occur, leads to the hiring of million-dollar consultants and the announcement of multi-billion-dollar road plans.

It follows that the government can make available passenger transport capacity almost equivalent to a second West Gate Bridge simply by ensuring that western suburbs trains don't get cancelled. By taking passenger traffic pressure off the Bridge, this makes more capacity available for the Bridge's more critical task of road freight transport.

The reliability and punctuality that is essential to maintaining a well-run train system (but is lacking in our own dysfunctional one) is provided by good management, of the sort that our new transport authority would provide. But a few well-targeted and inexpensive rail infrastructure projects will also be important.

Electrification of the train line to Sunbury was finally endorsed by the Eddington report and the VTP in 2008, almost 20 years after it was first proposed by the PTUA. It remains one of the most positive proposals in the VTP. But a similar treatment is also required for the Bacchus Marsh line, which currently runs non-stop through the extensive new suburb of Caroline Springs because there is no station. The VTP hints at future upgrades to this line, and a station at Caroline Springs, but a greater and more timely commitment is required.

Melbourne Airport is also long overdue for a rail link. In the past, local communities (egged on by the anti-rail lobby) have been led to fear the prospect of high-speed bullet trains racing at 300kph past private homes and backyards. But the most appropriate way to provide an airport link in Melbourne is as a modest extension to ordinary suburban train services, via either Broadmeadows or Sunshine. This ensures that airport passengers have access to destinations other than the CBD, and that the service is of use not only to air travellers, but also to the many hundreds of people who work at the airport every day and currently have no non-car transport options. Cities that provide airport services in precisely this manner include Boston, Newcastle-Upon-Tyne and Brussels. Melbourne could have such a service for less money than what the airport itself has spent on car parks.

The VTP also includes the Regional Rail Link, based on the inadequately explained Tarneit Link in the Eddington Report. The purpose of this link is just as confused in the VTP, making it difficult to judge what benefits are really provided. The primary purpose once again appears to be separating V/Line trains from suburban trains, solving a 'problem' that has more to do with unreliable running of suburban trains than with genuine capacity constraints in the network. But it is conceivable that, if the government is determined to encourage residential development in this area, a variant on the Tarneit Link could work as an electrified suburban service, linking the centres of Werribee and Sunshine and serving this residential catchment.

It is also important to ensure that train passengers actually receive the superior quality of service that a reliable electrified infrastructure makes possible. Among existing Sunbury patrons, for example, there are serious and justifiable concerns that their relatively comfortable and fast (though infrequent) V/Line service will give way to suburban trains that have a poor reputation for uncleanliness, poor security, crowding and slow running.[56] This underlines the vital importance of high frequencies and full-speed running, as well as frequently-neglected 'comfort' issues like cleanliness, and staff to ensure adequate levels of passenger security.

[56] "Sunbury rail split." *Hume Leader*, 16 December 2008. This and subsequent articles reveal a diversity of community opinion over the merits of electrification, mainly arising from the high level of dissatisfaction with Connex train services.

Bus-train coordination

Among the many cheap and effective solutions to the west's transport problems, bus-train coordination uniquely stands out. At present, buses and trains might as well be running on separate planets for all they have to do with one another.

Railway stations starting with Footscray should be upgraded where possible to provide for easy bus interchange. While many of the region's bus routes already terminate at railway stations, their timing is effectively random, ensuring that journeys requiring a bus and train are needlessly lengthened by arbitrary waiting times at stations. For bus routes that terminate or call at a single railway station, the timetable should be designed to reflect the running times of the trains, to ensure the bus can act as an adequate feeder service for local residents and provide an effective alternative to driving to the station (where there is frequently no car parking available, and further parking can only be provided at great expense).

Train frequencies

Despite recent improvements, western suburbs train frequencies are among the lowest in Melbourne. With an appropriate mix of 'direct' and 'loop' services at the city end, and convenient interchange facilities at North Melbourne to allow passengers to choose their final destination (just as Richmond station has been used for a similar purpose since the 1980s), there are no technical barriers to the immediate implementation of a 15 minute minimum frequency on all lines—including Upfield and Williamstown. The one exception is the single track through Altona, which is limited to a lower frequency until it can be at least partly duplicated. Werribee trains should therefore run every 10 minutes, with alternate trains proceeding 'up the straight' between Laverton and Newport (and scheduled immediately behind Geelong trains to minimise conflicts).

This simple measure will bring western suburbs trains up to the minimum standard that has applied on most eastern suburbs 'daytime' services since the 1990s. However, this basic frequency should apply not just during the day, but at all times, from first to last train. Melbourne does not stop after 7pm, and it is inappropriate to be providing a mere skeleton train service while the roads are full of people on the way to or from evening activities.

Of course, peak hour train services also need to be boosted to relieve the current overcrowding. Such a boost would also provide for additional patronage growth, but in reality there are only so many peak-hour CBD commuters. Already, some 85 per cent of CBD trips are by modes other than private car. Thus, patronage does not need to grow much above its current level in percentage terms before the entire CBD workforce is travelling to work by public transport, foot or bicycle. The development of Southbank and Docklands has grown the CBD workforce in recent years, but there are no further Docklands on the horizon. 'Official' estimates that assume a doubling in CBD commuting over the coming decades amount to little more than treating the current workforce like a bank deposit that accrues compound interest: you get impressive growth figures this way, but no amount of arguing over the 'interest rate' will yield a model that truly reflects geographical reality. We should expect instead that most growth in patronage will come from off-peak travel, and from suburb-to-suburb travel in peak hour.

A figure of around 50 per cent more peak-hour train services than now is a reasonable estimate of what is required in the foreseeable future to relieve overcrowding and accommodate peak-hour patronage growth. As we explained in Section 2.5, this is the figure that the City Loop's own designers expected it to deliver when operated as they intended. On some lines, achieving this increase is a simple matter of buying more trains and finding slots in the time-

table where they can run: a measure to which the government is already committed, more or less. But on most lines, additional services require modifications to both the timetable and to operating practices, as previously discussed.

Despite much of the confused rhetoric coming out of both Melbourne and Sydney, a 'metro' train system does not require that the lines be underground or use brand-new technology: there are plenty of metro systems around the world that satisfy neither of these criteria. But they do have other key technical attributes. One of these is good 'sectorisation', or ensuring that lines do not cross each other: something that is possible with our system if we run it as originally intended. The other is ruthless efficiency in operations such as turning trains around at termini: something we currently do very poorly, due in part to practices stemming from the mid-1990s, when there were fewer trains running and 10-minute layovers at Flinders Street were common.

The ultimate target for all Melbourne suburban lines should be trains every 10 minutes at every station, with more frequent services provided in response to demand. Shorter lines (such as Williamstown) would provide 'sweeper' services so that longer lines (such as Werribee) can run express through certain sections without reducing the overall level of service. Achieving this target would be a task for the new planning authority, which would apply world's best practice to identifying and addressing network constraints—rather than concluding at the outset that nothing can be done and putting their hand out for blank cheques, as at present.

Tram extensions

As mentioned above, the western suburbs are nowadays very poorly provided with trams. Just three routes—the 57 to West Maribyrnong, the 59 to Airport West and the 82 from Footscray to Moonee Ponds—service the entire region. (This was not always the case: route 82 is the sole remnant of some half-dozen tram routes that radiated from Footscray to adjoining suburbs like Maidstone, Tottenham, Kingsville and Seddon.)

While routes 59 and 82 could be said to have logical termini at major activity centres, route 57 comes to an abrupt halt in the middle of a residential area in Maribyrnong. This is a relic from World War II when the line was extended to convey workers to the former Commonwealth munitions factory (now to be developed as a new suburb, housing some 6000 people who will each have their own need to travel around Melbourne). To the west lie the suburbs of Avondale Heights and East Keilor, which—despite having the same population density as traditional 'tram' suburbs like Balwyn and Camberwell—have been provided with very little usable public transport at all.

Anyone travelling in or out of these suburbs must do so by car on one of few arterial roads: chiefly Milleara Rd, Military Rd or Buckley St. Not surprisingly, these roads suffer regular gridlock conditions. On Military Road to the south, much of the traffic is bound for Highpoint Shopping Centre, the Footscray area or the inner suburbs: all journeys doable by tram but for the last couple of kilometres. Although the creation of the route 903 'SmartBus' has for the first time provided the semblance of usable public transport (at least on weekdays) to those fortunate enough to live near Buckley St and Milleara Rd, it provides no assistance for journeys further south.

From time to time local councillors and community groups have floated proposals to improve public transport in this region. The cheapest and simplest of these is for a high-frequency 'Tramlink' bus to run from the current tram terminus and along Military Road, to connect

with the new 903 service. A bus would meet each tram when it arrives at the terminus, and likewise would deliver passengers to each citybound tram as it departs.

A connecting bus of this sort has a lot going for it, and could be put in place almost immediately, but it has one big disadvantage: it introduces a 'gratuitous' transfer point. It requires all passengers to get off a tram and onto a bus or vice versa at West Maribyrnong terminus, for no really good reason other than an historical accident dating back 70 years. Any good public transport network has large numbers of transfer points, but these are sensibly located at network 'nodes': at hubs such as railway stations and shopping centres, or at points where north-south and east-west routes intersect.

This is the reason why tram routes need a 'logical' terminus. It is not always sensible to extend tram tracks willy-nilly into suburbia when a bus route might suit passengers just as well. But where tram routes already exist, the prior investment in this infrastructure is wasted unless the route finishes at a point where a transfer to another route is logical. Such points are usually destinations in their own right, acting as focal points for services feeding into them.

The PTUA takes the view that the logical terminus for the route 57 tram is the Milleara Shopping Centre in East Keilor, at the corner of Milleara Road and Buckley Street. Even before the route 903 SmartBus commenced in April 2009, this had always been the logical point where a passenger might expect to transfer to a bus going east on Buckley Street, or one going further north along Milleara Road. With route 903 now in place, there is an opportunity to coordinate with an extended tram route 57 on a 'pulse timetable' with services arriving and departing at similar times. A sizeable number of passengers will also start or end their journeys at Milleara Shopping Centre itself, making it more than just a transfer point.

Other tram routes in the western suburbs are longer-term projects. We do not suggest building tram lines for the sake of it, and this is particularly inadvisable in the west, where the most beneficial choice of routes will not be clear until patronage improves dramatically. The first step, instead, is to have a bus network that reproduces all the essential features of a tram network (see below). Once such a network is in place and usage patterns are established, then the most heavily used bus routes become candidates for higher-capacity tram routes. Priorities for investment in new infrastructure such as tram lines would be decided by the transport authority, much as Vicroads now decides priorities for arterial road upgrades.

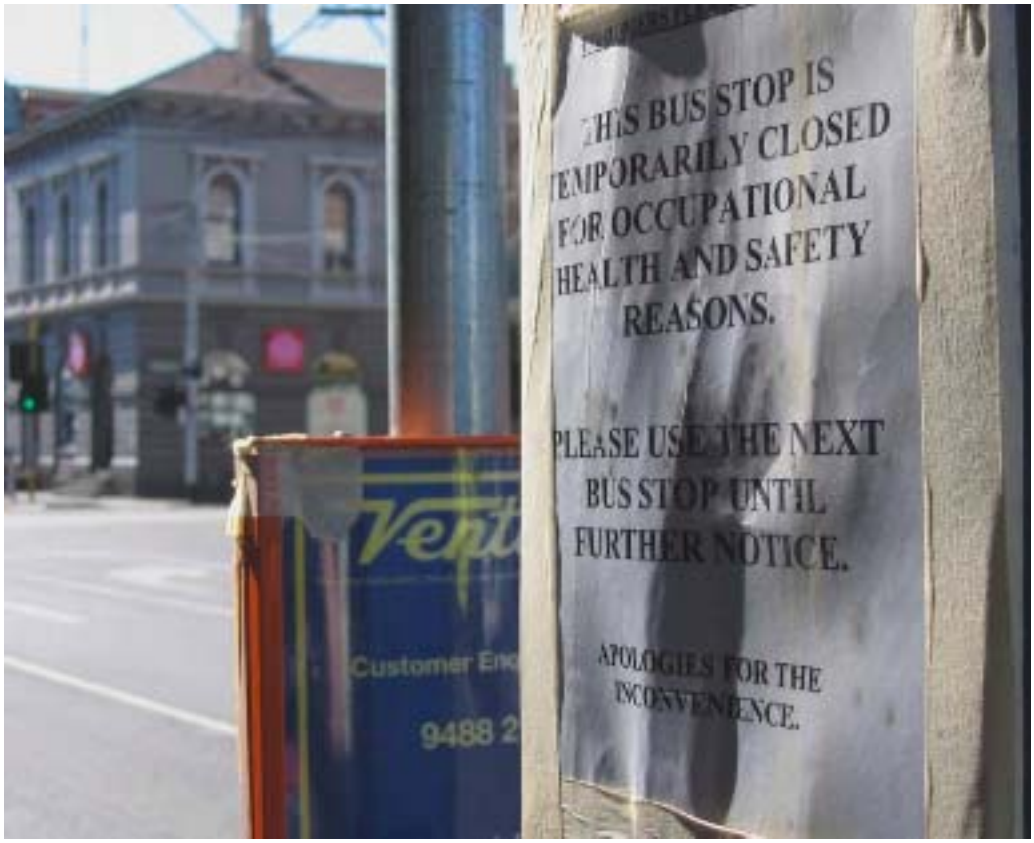
One possible future tram project with substantial local support is the Footscray–Docklands route along Footscray Road, currently served by the route 220 bus. With a frequency boost to match most tram services, this route would offer a more direct and faster journey for travellers accessing the Docklands area from the west, compared with backtracking from Southern Cross Station. At the same time, however, there is only limited technical justification for converting the existing bus route to a tram route. The main benefits would come from integrating the route with the existing Docklands tram network, and from the tram's greater visibility and smoother ride compared with a bus, which may in itself encourage greater patronage. Ultimately, investment priority for a project of this sort should be decided in the context of the entire region, rather than the present tendency to consider projects in isolation.

Bus network improvements

The aim of bus network improvements is to enlarge the catchment of the rail 'backbone' in a way that is not limited by car parking capacity, that provides those who live beyond walking distance of stations a sustainable transport solution, and that helps build up local multipurpose transport networks. A good bus network also supports better land use, allowing

valuable land near stations to be used for transit-oriented development instead of being swallowed up by car parks.

Although many Melbourne suburbs have recently undergone bus network reviews by the Department of Transport, they were not conducted with any view to changing buses' current role as a residual social welfare service at the margins of the Melbourne transport task. Bus services are provided as a 'mode of last resort', their level of service ensuring they remain unattractive to anyone having a private car alternative. Instead they try to earn their keep by servicing niche markets such as one particular school, or one particular retirement village. More often than not this requires buses to make lengthy, circuitous detours along traffic-calmed residential streets, making them not only too infrequent but also too slow to be of use for most people. And because the few passengers they do carry are mostly on concession tickets, cost recovery for such services is also poor. Such services are a losing proposition for both local communities and the taxpayer.



The poverty of Melbourne's bus system extends to passenger service—sometimes it's not even possible for passengers to get on the bus.

Here and there are routes that defy the general pattern, being direct and rather more frequent. The best recent example is the new route 903 'Red Orbital SmartBus', which follows a reasonably direct route connecting railway stations and suburban centres. But the 903 is only a single route, not a network, so only those journeys that happen to align with this one route are able to take advantage of the better quality of service. And while the weekday frequency has been improved to every 15 minutes—the bare minimum considered necessary by transport planners to attract 'choice' passengers with a car alternative—there are still half-hour gaps between many services on weekends.

In Melbourne, the benchmark for a well-functioning bus network is set by eastern suburbs tram services. Here is a network of both north-south and east-west routes, running at fre-

quencies no lower than every 12 minutes during the day, with last services at midnight, seven days a week, and with routes that are direct, easy to understand and in many cases segregated from private car traffic.

There is really no justification other than historical accident for running direct, high-frequency services in a few lucky inner-eastern and northern suburbs, and running poor services elsewhere. Melbourne's urban development patterns have changed little in over a century, and population densities are remarkably uniform (with a few high-density exceptions such as St Kilda and Richmond).

Buses in the west (and elsewhere) should run in the same manner as trams, largely following the established network of arterial and collector roads rather than detouring through local streets. Wherever a direct route can be identified from a suburban location to the nearest railway station, there should be a bus covering this route. Buses should run at the same frequency as trains, so that bus departures can be coordinated with train arrivals at stations and vice versa. (Initially this would mean that buses run at 15-minute frequencies rather than the 10–12 minutes more typical of trams, but the ultimate goal is for both trains and buses to run every 10 minutes.) Basic facilities for bus interchange should be provided wherever routes intersect: this may be as simple as having pairs of routes stopping at the same corner of an intersection, as is common practice in Toronto.

Where such principles are used for the design of fast, frequent bus networks—as in Toronto, Vancouver, many European cities and surrounding regions, and of course Melbourne's own trams—they are found to be successful in attracting full-fare-paying 'choice' passengers who otherwise would be driving cars. This is the 'world's best practice' that is ready to be applied in Melbourne by those who know how.

Bus and tram priority

Melbourne currently has some of the slowest street-based public transport in the world. This is largely a predictable consequence of the decades-old habit among traffic engineers, of treating public transport as an afterthought when designing intersections and traffic signals. The design of our traffic system means buses and trams are frequently and needlessly delayed by turning cars, by cars straddling traffic lanes or blocking intersections, and by clockwork traffic signals programmed to favour cars.

An eight-month study on one Melbourne tram route concluded that trams spent up to a third of their travel time waiting for red lights to turn green. This reduced the average speed of trams to that of a moderately fit jogger.[57] For buses in the western suburbs, the problem can be just as bad or worse. Ironically, a big factor in delay to suburban buses is the very traffic congestion that results from low rates of public transport use.

The latest research from Europe shows that even by the traffic engineer's traditional criteria of maximising vehicle throughput and minimising waiting times for motorists, clever self-adaptation of traffic signals based on upstream sensors can produce vast improvements over the 90-year-old 'clockwork' approach we still rely on today.[58] Transport operators in cities such as Zurich and Munich already rely on intelligent control systems to speed trams and buses through intersections: these operate so successfully that in Zurich, 90 per cent of trams and buses are met by a green signal at an intersection.

[57] A.B. Morton. "Observational Analysis of Tram Delays in Inner Melbourne." Australasian Transport Research Forum, 2007. Available online from the PTUA: www.ptua.org.au/publications/papers/tram-delays/.
[58] S. Lämmer and D. Helbing. "Self-Control of Traffic Lights and Vehicle Flows in Urban Road Networks." *Journal of Statistical Mechanics: Theory and Experiment*, 2008.

> Rather than detecting queues, the system counts vehicles and regulates entry according to local street capacity. Traffic signals at junctions are programmed to give absolute priority to trams and buses, and also to ensure that some capacity is given to pedestrians and cyclists; e.g. if an approaching tram is detected, a short green phase will be given to the crossing flow, both to clear it ahead of the tram and to enable passengers to reach the stop safely.
>
> —R. Ott, Zurich transport planner, 2002

It is only fair that a tram or bus carrying several dozen passengers should receive priority in traffic at least equivalent to a stream of several dozen single-occupant cars. Fortunately it only takes five seconds to move a single public transport vehicle through an intersection, compared with nearly a minute and a half for the equivalent number of cars. This is the basis for systems such as that in Zurich which trigger automatic green signals for buses and trams. In Melbourne we are also fortunate in that we have much of the infrastructure of sensors and transponders already in place: all that is lacking are the control systems for the signals themselves.

More intelligent control of traffic lights to prioritise public transport and to minimise waiting times will not only speed up public transport: the research evidence shows it would likely reduce travel times for suburban motorists as well.

Access for all

One of the few areas where the government has been making real progress improving the public transport system is in access for people with disabilities. Unlike other areas of improvement, disability access has had strong advocates within the government itself over the past two decades, leading to strong initiatives such as the building of tram 'superstops' and embracing the worldwide trend toward ensuring that all new buses and trams are low-floor vehicles.

Nonetheless, under privatisation the steps toward full compliance with the Federal Government's Disability Discrimination Act have been slower than they might have been. The building of tram stops with raised platforms actually commenced under public ownership, and was achieved at modest cost at locations such as the Swanston / Flinders Street intersection (though they have since been removed or replaced). Cost-effectiveness is of vital importance here, since with hundreds of tram and bus stop locations around Melbourne, maximising the number of accessible stops that can be provided with a given annual budget ensures that full access is achieved as early as possible.

Unfortunately, while the tram superstops built by Yarra Trams since 2000 are both expansive and visually appealing, they are also extremely costly. This has limited their application so far to the CBD and major interchange points, and has also fed an obsession by the operator with reducing the number of tram stops, thereby reducing the burden of compliance with DDA provisions. The planning and budget overheads associated with these more elaborate platform stop designs have slowed the roll-out of platform stops across the network.

While expansive superstops are probably appropriate for the CBD and interchange locations where they have been used to date, in the suburbs a simpler design of platform stop is called for, so that all existing stops can be converted in a realistic timeframe at reasonable cost. Integration of accessible tram stops with the existing roadway is made easier if combined with reduced speed limits and with measures to separate cars and trams where practicable, as with the lane barriers used in Flemington Road and Royal Parade (for example).

For buses, which pull over to the kerb to board and alight passengers, the provision of full accessibility is simpler but by no means trivial. It requires attention to kerb heights and profiles, the design of low-floor buses, and the use of tactile paving and other aids to accessibility. Such measures should be deployed at all bus stops to complement the introduction of low-floor buses.

Last but not least, full accessibility for public transport requires that attention be given to the state of footpaths, and to pedestrian safety. Since public transport doesn't go past everyone's front door, every public transport user is also a pedestrian. Yet throughout Melbourne's suburbs there are poorly maintained and poorly-lit footpaths that are difficult for able-bodied people to negotiate, let alone those with limited mobility. We cannot rely solely on local councils with their limited resources to seek out and repair footpaths: a programme of targeted State or Federal funding to local councils to actively identify and repair substandard footpaths, analogous to the Black Spot funding available for roads, is long overdue.

Night bus network

Any modern city needs at least a limited public transport service available around the clock, and in Melbourne this role is fulfilled by the Nightrider buses in the small hours of the morning when regular services do not run. Four of these night bus routes service the region west of the Craigieburn train line.

Although for the most part the Nightrider routes are well-aligned with the train network, there are some anomalies. No service is provided to Williamstown, despite the suburb having a substantial population and a degree of nightlife of its own. For the cost of just one additional bus and driver, the Williamstown area could be served with a Nightrider shuttle connecting to the Werribee Nightrider at Newport (similar to the Melton shuttle that connects to the Sunbury Nightrider at Deer Park).

The other major anomaly is the Craigieburn Nightrider route, which does not follow the Craigieburn train line but instead runs north to Brunswick, then west to Moonee Ponds, and follows the tram route to Airport West before doubling back from Tullamarine to Broadmeadows. This route has the great advantage of providing a night service to communities in Niddrie, Airport West and Tullamarine that are remote from the train line, but at the cost of providing no service in Pascoe Vale or Glenroy.

Again, a shuttle service connecting with the main Nightrider route, running from Essendon due north along Pascoe Vale Road, would fix the problem. Alternatively, the main route could itself follow Pascoe Vale Road to Broadmeadows and on to Craigieburn, with the branch operating from Moonee Ponds to Broadmeadows via Tullamarine. This structure better reflects the layout of the regular services, and may be less confusing for this reason.

There are other large populated areas that are remote from train lines and lack Nightrider services. These include Kingsville / West Footscray, Maribyrnong / Avondale Heights / Keilor, and Kings Park / Hillside. Interestingly Kings Park, despite its outer suburban location on the far side of St Albans, was the subject of a study based on Census data which found it to have the same population density as inner-city North Fitzroy! Nightrider services to these locations should also be provided, again as short branches connecting to existing services.

Passenger information

If you stepped outside your front door today, would you know how to find your nearest bus route? If you found a bus, would you have any idea where it went? How would you go about buying a ticket? Many people are deterred from using public transport through a simple lack of basic information like this. Trains and trams are easier: they travel in more or less straight lines, and their tracks are a prominent feature of the landscape. Most run frequently enough that passengers can just turn up and go. But buses are inherently enigmatic: their routes aren't marked on the ground, and (particularly in Melbourne) they're not seen often enough for people to become familiar with their routes or service patterns.

In cities with better public transport, bus routes are more direct and easier to understand in the first place. But they're still not obvious to a new user, and cities compensate for this with superior passenger information. As a minimum, they will have a route map and timetable at every bus stop. The best cities have entire network maps at every stop, and timetables for nearby routes as well as the one at that location. As a new user it is easy to find one's way around such cities. But of course *every* public transport user is a new user at some stage, and it is their experience as a new user that often determines their transport habits for life.

In Melbourne we fail to provide even the basic level of passenger information necessary to make the bus network comprehensible. Our bus information is usually worse than tram information, despite the fact that trams run more frequently and their routes are more visible. And the standard of information has even gone backwards: in the 1990s, some newly privatised bus operators removed timetables from two-thirds of their stops to cut costs.

The minimum standards for all public transport information in Melbourne should match those that exist on the tram system, including timetables and route maps at every stop, and advance notice at stops and in vehicles of scheduled service disruptions. Importantly, these standards must be enforced in operator contracts. Other areas of passenger information in need of attention across the whole system include clear directions on substitute services when normal services are interrupted for any reason. Too often passengers are thrown into confusion in these situations.

5.2 Freight Transport

Road freight

Melbourne's west has the city's highest concentration of road freight destinations. This makes the region particularly susceptible to the tendency for large trucks to use residential streets as short cuts, and for road authorities to react by redesignating these same streets as freight routes. The most egregious example is of course Francis Street in Yarraville, a street with houses along its length, which in the 1990s suddenly acquired the name 'Docklands Highway'—as if to say 'Big Trucks Welcome Here'.

The Eddington Report and the Victorian Transport Plan have proposed a solution to this particular problem, with ramps to provide direct access to the Hyde Street industrial area directly from the West Gate Freeway. Bizarrely, however, the Eddington Report went further than this and proposed *replicating the same problem elsewhere*! Eddington's Truck Action Plan would have demolished houses along residential Ballarat Road and Ashley Street in Maidstone to create a truck detour, even while it was proposing to fix the Francis Street problem. The outraged reaction from residents has led to this proposal being dropped from the VTP, although the VTP still proposes driving a 'motorway by stealth' through Sunshine Road and Dempster Street further south, which have adjoining residential areas.

The Hyde Street ramp proposal illustrates a general principle, which merits being applied across the western suburbs and elsewhere to keep big trucks out of residential streets. The principle is that heavy freight vehicles should be made to use the existing motorway network as much as possible, and this should be supported with more direct access between motorways and adjoining industrial areas, and with measures such as dedicated freight lanes on motorways.

On the West Gate Bridge, for example, former emergency lanes have been commandeered to provide five traffic lanes in each direction. With trucks and buses predicted to make up 20 per cent of traffic on the bridge in coming years, and efficient freight movement now the prime justification for building big new roads, it makes sense to dedicate at least one lane in each direction for the exclusive use of trucks and buses. This will effectively isolate freight from the effects of private car congestion. A similar measure also makes sense for the 'upgraded' Western Ring Road, which will now have four or five lanes in many sections.

As already noted above, there is no destination in the western suburbs more than 5km from a motorway. There is no need for heavy freight vehicles to be using local roads other than to access their specific destination—and many freight depots have strategically located themselves near motorways in any case.

Better movement of freight is also ensured, of course, by reducing the level of passenger car traffic with which it competes. The above measures to improve public transport all have the aim of encouraging mode shift away from cars, and so have indirect benefits for road freight as well.

Rail freight

The State Government has just recently woken up to the importance of rail freight. For many years, the favourable treatment of road relative to rail has caused the rail freight sector to die a death of a thousand cuts, putting more and more trucks on the road. For example, the closure of CRT Group's Port to Altona rail freight shuttle in January 2007 was estimated to have generated 3,500 additional truck trips a day. This has been allowed to happen even while the government notionally had a target of 30% of freight on rail by 2010.

There are few losers from boosting the share of rail freight relative to road freight, particularly if career pathways are in place for truck drivers to enter the rail freight sector. But this clearly requires a degree of Federal–State cooperation over issues such as road and rail user charges, and this is what has held up progress for so many years. We have seen the same kind of buck-passing as occurs in Melbourne between private train and tram operators and the State Government. In theory the National Transport Commission should act as an independent umpire, but when in 2006 it recommended the creation of a more level playing field between road and rail freight, with a single economic regulator, the Howard Government simply ignored the recommendation.

At present, truck registration charges do not reflect the cost that trucks impose on the road system, and they are explicitly barred from increasing faster than CPI, even though the cost of providing roads has increased faster than CPI in almost every one of the past ten years.[59] By comparison, rail freight users must contribute to the full cost of maintaining the network; unlike truck operators, they do not benefit from a cross-subsidy from other road users and taxpayers.

[59] Calculations based on BITRE Road construction and maintenance Price Index (2009 update) in comparison with ABS Consumer Price Index numbers.

The imminent introduction of a carbon price for Australia, in conjunction with the restructuring opportunities presented by the economic downturn, should lead to a renewed push for pricing road and rail freight in a way that does not artificially distort the market in favour of trucks. Now that the State Government is facing the embarrassment of missing its 30% freight target by a mile, this must become an action priority at State and Federal level.

5.3 The Road Network

In the west, as elsewhere in Melbourne, we now find congested motorways where there was nothing at all just 10 years previously. To provide any more would be counterproductive. Expansion of motorways simply bleeds passengers away from public transport, adds to congestion and pollution, and results in further delays to freight and commercial traffic. We need no more evidence of this than the experience of the past twenty years. The Eddington East-West Tunnel would do all this, and also destroy people's homes and parkland.

That said, there are ways the road network could be improved, but that have been largely ignored by government. For years, local residents have campaigned for the removal of railway level crossings, which have been the site of a number of crashes and near-misses over recent years. Although the work required involves railway infrastructure, ultimately these are road projects, as it is overwhelmingly road users who benefit.

In the west, the campaigns have been loudest in St Albans, Yarraville and Kensington, but what is really needed is to revive the level crossing elimination programme Melbourne had in the 1960s, and carry it to virtual completion as Sydney has already done. The programme now has an initial budget allocation thanks to the Victorian Transport Plan, and the western suburbs should rate highly among projects deserving of early funding.

One issue with the proposed rail electrification to Sunbury is the limited number of road-rail crossing points: only two exist in Sunbury, and one of these is a level crossing. In order that an increase in train services does not contribute to traffic congestion, either a grade separation at the Station Street crossing, or a second bridge over the railway, or both, should be implemented alongside the Sunbury electrification project.

5.4 Summary

In Melbourne's west, the alternative to the West Gate Bridge is a public transport system that works. With a few targeted upgrades to the train and tram network, and an overhaul of the bus network, even the long-neglected west can have public transport equal to the best in the world. Better public transport aims explicitly to attract people out of cars, and therefore has indirect benefits for freight movement as well.

6 What You Can Do

The dream of a liveable city and State outlined in this document can be made real; but this won't happen without ordinary people raising their voices and demanding change. Here are a few concrete actions to get you started.

6.1 Seek More Information

One of the key tools in the fight for change is information. Politicians and 'Hollowman' political minders and bureaucrats exploit a lack of information to bamboozle the public into accepting policies that are contrary to their best interests. The more you know, the more power you have to challenge politicians and the vested interests they represent.

We have outlined in this document the detail behind the government's ongoing failures in transport policy, and an alternative solution based on world's best practice. But don't just take our word for it. In the 'Further Reading' section below we provide some other resources that you can use to learn more about transport. Much of what we have discussed is mainstream and uncontroversial in other parts of the world, even if our peculiar local habit of putting road lobby and other vested interests in charge of transport planning makes it contentious in Melbourne.

6.2 Use the Media

Politicians respond to media stories like Pavlov's dogs to the dinner bell. In no other era has government policy been more driven by media reaction than today. So an important part of campaigning for change is to tap into this process and keep issues in the media.

There are a number of forums through which you can raise issues in the media yourself.

- Talkback radio is perhaps the most effective of all 'citizen media'. Talkback is the voice of the Aussie battler, and politicians ignore it at their peril. Radio programmes generally have 'open line' sessions at particular times when people can call in on any topic, and public transport is often featured as a topic in its own right. Don't feel intimidated when ringing up: everyone else on the radio is really just like you.
    - 3AW talkback: 9696 1278
    - ABC 774 talkback: 1300 222 774
- A letter to the editor of the major metropolitan newspapers can be influential. Letters are best sent by email (in message text, not an attachment) and should be kept to less than 200 words: the shorter it is, the better your chance of having it printed. Don't forget to include your home address and a contact phone number.
    - Herald Sun: hsletters@heraldsun.com.au
    - The Age: letters@theage.com.au
- If there's a particular local issue you're concerned about, you can write a letter to your local paper, or even pitch a story to them. Local papers are always particularly keen for content, so you have a reasonable chance of being published. Find local papers for your area at the following websites:
    - Fairfax Community Network: www.fcnonline.com.au/vic/

    - Leader Community Newspapers: leader-news.whereilive.com.au

- Many media outlets have started electronic forums to engage with the online community. Journalists have started blogs, and newspaper editors will often solicit comments on the 'issue of the day'.

Remember that politicians monitor all media outlets, no matter how big or small, so every letter and talkback segment counts. Better yet, encourage your friends to write or call in with their own concerns as well.

6.3 Bother Your Politicians

While stories in the media are important in getting politicians to act, approaching politicians directly can make the point in a more immediate manner.

All citizens in a democracy should feel entitled to ring up or visit their local Members of Parliament to express their concerns. This is what MPs are there for, and is how they earn their votes. The Victorian Parliament provides an online handbook you can use to find your MPs:

- www.parliament.vic.gov.au/handbook/

Every Victorian has one lower house MP (representing a local electorate) and five upper house MPs (representing one of eight regions of Victoria). That's six people in the government you can contact to begin with. If you have the time, letters are more effective than phone calls, and visiting an MP's electorate office in person is more effective still. Again, don't feel intimidated: hassling your MP is your right. (And if you don't, others with different political agendas to you will do it instead).

Of course, ultimately the transport system is the responsibility of the appropriate Minister, not to mention the Premier himself. Let them know how you feel.

- Lynne Kosky, Minister for Public Transport
    - Email: lynne.kosky@parliament.vic.gov.au
    - Ministerial office: Level 16, 121 Exhibition Street, Melbourne 3000
    - Postal address: PO Box 6519, Point Cook Town Centre, Point Cook 3030
    - Phone: 9655 3300
    - Fax: 9655 3313
- Tim Pallas: Minister for Roads and Ports (and *possibly* rail freight)
    - Email: tim.pallas@parliament.vic.gov.au
    - Ministerial office: Level 16, 121 Exhibition Street, Melbourne 3000
    - Phone: 9655 6210
    - Fax: 9655 6651
- John Brumby, Premier of Victoria
    - Email: john.brumby@parliament.vic.gov.au
    - Ministerial office: 1 Treasury Place, Melbourne 3002
    - Phone: 9651 5000
    - Fax: 9651 5054

- Ted Baillieu, Leader of the Opposition
    - Email: ted.baillieu@parliament.vic.gov.au
    - Opposition office: Parliament House, East Melbourne 3002
    - Electorate office: 325 Camberwell Road, Camberwell 3124
    - Phone: 9651 8512
    - Fax: 9651 8426
- Terry Mulder, Shadow (Opposition) Minister for Transport
    - Email: terence.mulder@parliament.vic.gov.au
    - Electorate office: 115a Bromfield Street, Colac 3250
    - Phone: 5231 5046

6.4 Join a Local Campaign

In addition to the PTUA itself, there are a multitude of local community groups campaigning for sustainable transport alternatives to big road projects. Some can be found in the 'Further Reading' section below.

Of course, the PTUA is always keen for more members, to demonstrate the numbers in favour of first-rate public transport solutions: www.ptua.org.au/join/. Sign up now for 5 newsletters a year and the chance to get involved in transport campaign activities.

6.5 Use Your Vote in 2010

It's vitally important that we see change at State Government level in order to kick-start the solution. At the forthcoming election, be sure that the person or party you vote for is genuinely committed to the sustainable transport principles expressed in this document. Motherhood statements that "public transport is a good thing" aren't good enough any more: we need real action and firm policy positions, with actions and timelines.

"Yes We Can" make transport work again in Melbourne!

7 Further Reading

The following are some additional online and print resources that will allow you to find out more details about Melbourne's transport problems and their solutions.

7.1 PTUA Resources

www.ptua.org.au/myths/

This collection of web pages debunks all the current 'urban myths' about transport. Here you can find the detailed evidence on why freeways don't reduce congestion, why we don't need to spend $38 billion to make public transport great, and why it isn't the snow that makes public transport popular in Canada.

www.ptua.org.au/policy/

Statements of official PTUA policies on specific subjects.

www.ptua.org.au/govern/

This is the PTUA's position paper on public transport governance. This describes the different models for managing transport systems, the arguments for and against, why our current system is one of the worst and how it can be improved.

www.ptua.org.au/campaigns/every10minutes/

Details of the PTUA's 'Every 10 Minutes To Everywhere' campaign, including answers to frequently asked questions.

www.ptua.org.au/publications/papers/

A collection of occasional technical papers and submissions to government enquiries. Includes our submission to the Garnaut emission trading scheme (*Climate Policy at the Junction*) which sets out in detail why transport must be at the forefront of the fight against climate change, not a mere sideshow. Also includes a paper on our tram travel time study, which found that trams spend up to a third of their time waiting unnecessarily at red lights.

7.2 Other Resources

www.mtf.org.au

The Metropolitan Transport Forum (MTF) is an alliance of local councils created to promote sustainable transport.

www.pt4me2.org.au

An initiative of the MTF (see above) to create online communities around sustainable transport initiatives. On this site you'll also find the MTF alternative transport plan, which contains many ideas similar to our own. (Hardly surprising, since we and the MTF both draw on a wealth of international experience with good transport planning!)

www.thepeopleplan.org.au

The Victorian Greens' alternative transport plan for Melbourne. Again similar to ours (drawing on similar principles) but with much more ambitious spending proposals.

www.ycat.org.au

Yarra Campaign Against Tunnels is a community campaign to oppose a massive tunnel through Melbourne's inner northern suburbs and parks and to demand great public transport.

respectthewest.net

Groups from all over the Western Suburbs of Melbourne are joining forces to advocate for a fair go, community consultation on key planning proposals, and to demand equity in service provision. This Community Action Portal is a resource site for news on all community and campaign groups seeking to develop a better and stronger future.

www.abp.unimelb.edu.au/gamut/

The University of Melbourne's Centre for Governance and Management of Urban Transport. This research centre is dedicated to promoting and supporting sustainable urban transport in Australia and the Asia Pacific region.

www.griffith.edu.au/environment-planning/urban-research-program/

The Urban Research Program at Griffith University in Brisbane was established in 2003, and is now the largest research group in Australia dedicated to urban planning issues. It is perhaps best known for its work on the VAMPIRE index, which maps the vulnerability of Australian households to mortgage and petrol price stress according to geographical area.

www.hitrans.org

HiTrans is a project by the European Union, launched in 2005, to improve the quality of public transport in medium sized European cities. It has produced a number of 'best practice' guides, which reflect many of the same principles underlying our plan for Melbourne.

***A Very Public Solution*, by Paul Mees (Melbourne University Press, 2000)**

Melbourne transport academic Paul Mees (now a Senior Lecturer at RMIT) has been a prominent figure in the transport debate, and served as President of the PTUA through the 1990s. This book sets out the 'quality of service' analysis of public transport success and failure, showing where Melbourne's transport policy problems lie through detailed comparisons with Toronto, Canada. Unfortunately this book is now out of print, but copies are available at many libraries. A successor volume by Dr Mees is set to appear later this year.

www.metlinkmelbourne.com.au

The official website of Metlink, the umbrella body for Melbourne's public transport operators. Provides comprehensive timetable information, service announcements, and an online journey planner.