

Facts & Figures from the Minister

"We've cut the road toll significantly, but our roads are not as safe as they should be. They're more congested, and the behaviour of drivers on main roads is spilling onto back streets. Once 'back roads' or 'country roads' are now major traffic arteries. Here are just a few facts:

- *In 1980, Australian car drivers drove 88 billion kilometres.*
- *By 2009, this had almost doubled to 165 billion kilometres;*
- *The average load of an articulated truck when in use was about 18 tonnes in 1980.*
- *In 2009, the average load is 29 tonnes – a 60% increase.*
- *Average congestion delay times in Australia's capital cities have risen from about 0.24 minutes per kilometre driven in 1980 to 0.36 minutes per kilometre in 2009. This represents a 50% increase, with three quarters of that occurring in the last 10 years.*

"Cars are being driven further; trucks are bigger and heavier and commute times are longer. It is the duty of those of us who are policy makers to find an answer that can start to make our roads even safer, allay user concerns and in the process speed up our transport systems. This isn't going to be easy – because the projections are for more traffic growth and greater demands on public transport. Urban car and light commercial vehicle use is forecast to grow 33% and urban truck use by 47% over the next 20 years. Urban public transport patronage has increased 22% over the past four years, and is forecast to grow by a further 78% over the next 20 years. While challenging to manage, the free flow of passenger and freight movements is crucial to the continued growth of the economy. There are significant costs if that flow is impeded. For instance, it has been estimated that if we fail to act, the cost of urban congestion could be \$20 billion per annum by 2020."

Ref: Anthony Albanese, MP, Extract from his address to the Australian Intelligent Transport Systems Summit, 20/11/09

And Also ...

"Since, travel accounts for around 21% of the UK's total domestic greenhouse gas emissions, the need to place our travel on a more sustainable footing is absolutely key. ... So we're spending money on widening our roads and motorways to relieve some of the congestion that blights our journeys." Ian Lucas, MP, Speech on Sustainable Travel in a Low Carbon Economy, BMW Conference, Berlin, 3/12/09

Tindo, The Solar Electric Bus

"The Adelaide City Council's electric solar bus is the first in the world to be recharged using 100% solar energy, and will be used everyday by the people of Adelaide through the Adelaide City Council's free Adelaide Connector Bus service. Tindo – the Kurna Aboriginal name for sun - is the culmination of the Council's eight-year project to deliver a pure electric community bus.

"International research suggests people strongly prefer electric buses to those powered by other means, such as diesel engines. Electric buses can operate in busy City streets and residential neighbourhoods in a clean and quiet manner, which makes them very popular with both passengers and the public."

Ref: Adelaide City Council Fact Sheet

www.adelaidecitycouncil.com/adccwr/publications/guides/factsheets/tindo_fact_sheet.pdf

"I went and saw the panels that charge it - there were hundreds of them! I was shocked that it took so much power to run the bus and felt a bit disheartened however I recognise that demonstration projects like this are crucial."

Ref: 'Reader's Contribution', 28/7/09

Editor's Comment: The number of solar panels required shows the energy capacity and value of oil, and poses the question: *'Why does our generation waste it so wilfully'?*

National Electric Vehicle Festival

About 8,000 people visited the National Electric Vehicle Festival held in Canberra on 3-10-09. The (all electric) Tesla Roadster, which can accelerate from zero to 100km/h in 3.9 seconds, strutted its stuff. Two working Detroit Electrics (1915 & 1917) turned up and rumbled around to show that EVs are not new. There were electric racing cars, go-carts, bikes, scooters, bicycles, tricycles and even the two-wheeled Segway. Most encouraging were the (ex-petrol) cars that had been converted into fully electric vehicles by their proud owners – and registered. Isn't it amazing that some enthusiasts can achieve in a few months what the big motor makers spend years just spinning their wheels – pretending to do.

Ref: Bill Gresham, 27/10/09

The event was staged by the Australian Electric Vehicle Association. More details can be found at <http://canberraev.org/festival.html>
<http://j.mp/evfest>
<http://onfourwheels.blogspot.com/2009/10/electric-vehicle-festival-2009.html>

Problems with Trucks (Part 1)

"A flood of trucks on to the state's roads in the past decade - in 1995 there were 464,000 trucks in Victoria compared with about 606,000 today - has fuelled community fears about their dangers. Drivers report feeling terrified by the 'wall of trucks' they say now regularly confronts them on city freeways. If they're scared now, they should prepare for worse: by 2030 the Government predicts there will be 1.12 million trucks on the state's roads. The Government has ruled out a congestion charge to dissuade trucks from entering the city cordon, as has happened in other cities where the port is not so centrally located. So what is to be done? ...

"Logistics consultant Kim Hassall last year helped the Department of Transport finally put out its long overdue freight strategy, *Freight Futures*. By that time, however, anger about high levels of trucks on local streets - Hassall calls it 'freight exposure' - was growing. Increasingly vocal groups such as the Maribyrnong Truck Action Group in the inner west, which says their neighbourhood endures 20,000 noisy and polluting truck movements a day, have forced the Government to pay attention to truck numbers. Ironically, the key solution Hassall and most in the freight industry have now embraced is bigger trucks - or 'monster trucks' as critics like to call them. The Government has opted for another name for the bigger model of trucks involved in its two-year 'trial': high-performance freight vehicles.

"These bigger vehicles, says Hassall, will result in fewer trips and less pollution because they are newer. At 30 metres they will be four metres longer than existing articulated trucks. They will also carry up to 77 tonnes of goods, nine tonnes more than the biggest existing trucks. Roads Minister Tim Pallas has assured car drivers the trucks will be safe and, less convincingly, that they are 'not intimidating'. ...

"Also crucial to the Government's plan to control truck numbers is a new principal road freight network. 'Its simplicity for operators is the key', says Hassall, 'because they now know precisely where they can run their vehicles'. The steep rise in truck numbers on the state's roads has coincided with a collapse in rail freight. From the Port of Melbourne - Australia's busiest port - just 2% of freight travels by rail. To redress this, and get the Government's previous (and now dumped) target of 30% of freight on to rail,



Freight Futures also promises to put in place a charge to encourage trucks to access the Port of Melbourne at off-peak times. (A similar charge helped shift trucks at the Port of Los Angeles to off-peak times.) To encourage rail freight, no such charge will apply to rail. But, like so much involving trucking in Victoria, there has been much talk about the charge - and no action. Minister Pallas' spokesman confirmed that no date has been set to begin charging the access fee, and that more consultation with the transport industry is required.

"A more dramatic solution proposed by the Government to push up freight on rail is building rail-truck interchanges on the fringes of Melbourne. It is hardly a new idea. In 2003, then transport minister Peter Batchelor promised to set up the state's first rail-truck interchange in Dandenong, to start rail's renaissance. He never delivered. Now, in a case of *deja vu*, the current Roads Minister has upped the promise, and pledged three rail-truck interchanges. Donnybrook, not Dandenong, will now get the first truck-rail interchange, although once again there is no timeline for delivering it. These rail-truck interchanges would, in the short-term, allow freight to be broken down on the outskirts of Melbourne so fewer B-doubles need run around Melbourne. Ultimately, too, they mean more freight moved back to rail." {Cont. in #136}
Ref: Clay Lucas, *The Age*, 7/10/09

Dutch to Charge by the Kilometre

"The Dutch government is to become the first country in Europe to introduce a green tax to replace annual road tax on cars. Drivers will have to pay per kilometre driven in a bid to end chronic traffic jams and cut carbon emissions. The system, which will use Global Positioning Systems (GPS) to monitor cars, could be used as a test case for other countries weighing options for easing crowded roads. Singapore has a similar scheme for charging according to the amount of travel. When the plan takes effect in 2012, new car prices could fall by as much as 25 per cent with the abolition of purchase and road taxes. Instead, an average passenger car will pay €0.03 per kilometre, with higher charges levied during rush-hour and for travelling on congested roads. But the Dutch Transport Ministry said trucks, commercial vehicles and bigger cars emitting more carbon dioxide will be assessed at a higher rate. The GPS devices installed in cars will track the time, hour and place each car moves and send the data to a billing agency."

Ref: AP, *The Independent*, 16/11/09

Investing in Public Transport

"Investment in public transportation expands service and improves mobility, and, if sustained over time, can potentially affect the economy by providing:

- *travel and vehicle ownership cost savings for public transportation passengers and those switching from automobiles, leading to shifts in consumer spending;*
- *reduced traffic congestion for those travelling by automobile and truck, leading to further direct travel cost savings for businesses and households;*
- *business operating cost savings associated with worker wage and reliability effects of reduced congestion;*
- *business productivity gained from access to broader labour markets with more diverse skills, enabled by reduced traffic congestion and expanded transit service areas; and*
- *additional regional business growth enabled by indirect impacts of business growth on supplies and induced impacts on spending of worker wages. At a national level, cost savings and other productivity impacts can affect competitiveness in international markets. ...*

"The analysis shows that public transportation investment can have significant impacts on the economy, and thus represent an important public policy consideration. However, economic impacts should not be equated with the value of total societal benefits associated with public transportation investment. Care should also be taken to recognize the short-term effect of public transportation spending as well as the longer-term benefits of sustained transportation investment on travel times, costs and economic productivity. Both may be useful considerations for public information and investment decisions."

Ref: American Public Transport Association, October 2009 See full report at:

www.apta.com/resources/reportsandpublications/Documents/economic_impact_of_public_transportation_investment.pdf

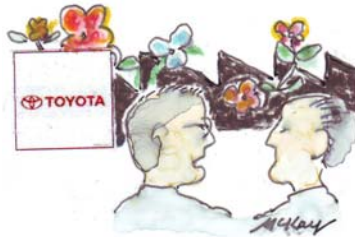
"An estimated 75,000 people got free rides on November 15 during the opening celebration for a 9.7 km extension of the Gold Line from Union Station to East Los Angeles. The public launch followed a formal opening ceremony for the East Side extension on the previous day. ... The project cost US\$898m, including a 2.7 km two-station underground section, and took five years to construct after a decade of planning.

Ref: Railway Gazette International, 16/11/09



Toyota's Flower Power

"Toyota has created two flower species that absorb nitrogen oxides and take heat out of the atmosphere. The flowers, derivatives of the cherry



'We can grow anything but sour grapes. We leave that to our rivals.'

sage plant and the gardenia, were specially developed for the grounds of Toyota's Prius plant in Toyota City, Japan. The sage derivative's leaves have unique characteristics that absorb harmful gases, while the gardenia's leaves create water vapour in the air, reducing the surface

temperature of the factory surrounds and, therefore, reducing the energy needed for cooling, in turn producing less carbon dioxide (CO₂). The two new plants are part of a wide-ranging plan to reduce the impact of Prius manufacture on the environment. Since 1990, the plant has reduced CO₂ emissions by 55%.

"The plant at Tsutsumi has solar panels on its roof to generate electricity and special photocatalytic paint on its exterior walls to absorb harmful airborne gases including NO_x and sulfur oxides (SO_x). Inside the plant, some of the light is provided by reflective solar tubes which beam reflected sunlight into rooms, replacing electric light globes, while motion-sensitive lights in the toilet turn off when they are unoccupied. The office air-conditioning system is kept at a balmy 28 degrees in summer to reduce CO₂ output and white collar employees are allowed to wear short sleeved shirts and no ties to compensate for the warmer office temperature. Even the grass has been specially developed to grow more slowly than conventional lawn. As a result, it only requires mowing once a year, compared with three times for the grass it replaced. In 2008, Toyota planted 50,000 trees to offset the factory's CO₂ emissions.

"Toyota has been criticised by its rivals, who claim the company's petrol-electric Prius isn't as green as other conventional vehicles once the car's manufacturing process is taken into account. Critics claim the Prius production process creates more CO₂ than normal petrol vehicles, nullifying the lower CO₂ output of the car itself. Toyota admits the production process is more CO₂-intensive, but says that by the first year of its life, the Prius has wiped out the deficit. The company also denies its CO₂-reducing initiatives are related to the criticism the car has received."

Ref: Richard Blackburn, The Age, 726/10/09

Senate Report Extracts (Part 6)

4.7 *"To improve public transport speed the major focus will have to be tram and bus priority measures, the aim of which is to make services congestion-free. These measures are also very important to improve reliability, since delay in traffic congestion is the major cause of unreliable service (and unreliable service is very detrimental to the rider's experience even if the nominal frequency is good)."*

4.8 *"Speed and frequency combine to make total trip time, including waiting time, perceived by the rider, so tradeoffs between them are possible. Frequency and reliability will be more important for shorter trips, especially transfer trips (trips with interchange between two public transport services). Linehaul speed will still be important for longer trips between major [interchanges]."*

4.9 *"Comfort involves both the design of the vehicle and the level of crowdedness. It is to be expected that as general living standards improve comfort becomes relatively more important, as can be seen in the improving design of trains and buses as well as cars (with air-conditioning standard, for example). Mr Litman (Victoria Transport Policy Institute) suggested that public transport operators should focus more on comfort as a way of marketing against the convenience of car travel. Both actual and perceived safety and security concerns should also be addressed."*

4.13 *"Submissions argued that to encourage use of public transport for a wider variety of trips, it is important to create a complete network. This requires a complete grid or spider's web of routes with sufficiently frequent services; quality interchange facilities; timetables and ticketing that facilitate transfers; excellent information services; and preferably a single metropolitan public transport authority to plan and promote these things."*

4.16 *"For example, comparing Melbourne with Toronto (which is often cited for its well-managed, integrated public transport service): though they have similar population and urban form, Toronto has a more rational grid of routes and better planned interchanges. It has a much higher proportion of linked trips (trips that involve transfer between two or more public transport vehicles) and a much higher occurrence of riders accessing train stations by bus. Toronto also has much higher public transport use per person than Melbourne. European cities with still higher*

public transport use have a still higher proportion of linked trips."

4.17 *"To encourage occasional users and transfer trips, it is essential to have a legible network of routes and excellent information about timetables and ticketing."*

4.20 *"These things are particularly important to attract new and infrequent riders and off-peak riders. It is important to market to these groups, not only to the city commuters who are the focus of the most current concerns about overcrowding, because accommodating more off-peak riders on existing services has low marginal cost and will improve cost recovery."*

4.27 *"Submissions noted the need to plan measures to encourage cycling and walking consistently with public transport measures, as they support each other."*

4.35 *"Submissions stressed the need for good governance to make sure that the city's public transport services are delivered effectively and to make sure that infrastructure investment is prioritised widely."*

4.37 *"In evidence to this inquiry the key element of good governance was usually said to be a single regional public transport authority with the power and responsibility to plan and deliver the city's public transport service in an integrated way under a single brand (whether or not service provision is contracted out)."*

4.45 *"Submissions stressed the need to integrate transport planning with urban planning generally. The public transport will not attract riders if the pattern of development in the region makes it impossible to plan an efficient network that serves the places where people want to go."*

4.46 *"Major city strategic plans invariably express a goal of making urban development more conducive to public transport use - for example, by promoting infill development, slowing urban fringe development, and concentrating commercial development in selected regional centres which can be the focus of logical public transport networks."*

4.47 *"Measures to reduce car-dependence and make public transport work better in new suburbs include:*

- *reserving new corridors for fast public transport early in the planning of greenfields developments;*

- subdivisions planned with a street pattern that allows buses to be routed efficiently, with good pedestrian access from bus stops to the surrounding area;
- activity centres located rationally so they can be the focus of transport networks or interchange points;
- design principles that give high priority to a quality environment for cyclists and pedestrians - for example, cycle-friendly road design, permeable street layouts which do not force circuitous trips, and suitably placed local and neighbourhood centres to promote walking and cycling for trips within the neighbourhood;
- public transport services provided from the outset, rather than being retrofitted years later, after the new residents have established car-dependent habits;
- 'transit oriented development' - medium density mixed-use development around public transport nodes; and
- increase in residential density generally...."

4.52 "Governments who promote urban consolidation to reduce car use need to remember that the planning policy is not enough: improved public transport must also be provided. Denser population in areas where existing public transport is mediocre or overloaded, without improvement, will simply increase traffic congestion."

4.62 "Many submissions raised concerns about poor public transport in rural and regional areas."

4.63 "Local town services, where they exist, have the features of outer suburban services: they are mostly infrequent 'social service' services for non-drivers, which cannot attract 'choice' customers. Inter-town services connecting smaller towns to regional centres are usually extremely infrequent, and may have poor coordination of information services and marketing, which discourages occasional users."

4.64 "Submissions noted not only poor basic services, but deficiencies of organisation and coordination which limit the usefulness of such services as do exist."

4.65 "Cross-border coordination problems exist."

4.68 " 'Community transport' has no precise boundaries, but usually refers to transport more tailored to special needs than is possible with regular public transport - for example, serving the health care or social needs of people with disabilities or the frail elderly. It may be offered

by local councils or charitable groups using buses, minibuses or cars. It has a focus on door-to-door service, but may also involve scheduled services (for example, a weekly community bus). Drivers are often volunteers."

4.71 "Community transport needs are increasing because of the aging population and the trend to regional centralisation of health services and similar social services.⁷⁰ Submissions noted the increasing burden that is falling on local councils who provide transport not only for special needs groups but also to make up for the lack of adequate regular public transport."

4.75 "To return to public transport more generally: the aim of the measures mentioned above is to change people's travel behaviour in favour of more sustainable, less car-dependent behaviour, leading to cleaner and less congested cities. That change may be slow, as it requires changing patterns of urban development and human behaviour developed over two generations."

4.76 "The important thing is to set a trend to reduce car-dependence in the long term by creating incentives for behaviour change and providing the means for that change to occur. In the foreseeable future walking, cycling and public transport will continue to be unsuitable for many travel needs. The aim is to make it easier for people to use them where they are suitable. On the positive side, because the present public transport share is so low, only a small behavioural change by motorists is needed to greatly increase public transport use. This would make better services more viable."

Ref: Investment of Commonwealth and State Funds in Public Passenger Transport - Senate Transport Reference Committee, August 2009
http://www.aph.gov.au/Senate/committee/rrat_ctte/public_transport/report/report.pdf {Cont. in #136}

Interview with Oz Kayak (Part 5)

Oz Kayak started as an engineering cadet with the Victorian Roads Authority, later worked with Victorian Railways and today is passionate about active forms of transport, community health and urban design. Here continues our discussion:

Stephen Ingrouille: But isn't that the nature of freeways, it just moves the congestion?

Oz Kayak: Well no, what we've done with Eastlink, and with the outer ring, and the tunnel, and the elevated road, we've see a whole bypass [of the city centre], which we are very good at doing in country areas. We've been doing that for along time, it's a lot simpler with farm land and maybe

one or two houses. But in the late 60s, the Monash Freeway as it is now called, came through Caulfield and connected at South Melbourne. It did not connect along the South-Eastern Freeway at the city end, at Burnley, that's an MMBW solution that went out as far as Malvern. But while it was being finished past Glenferrie Road the strategic spearhead that we inherited, actually had the Monash going to the south through South Melbourne. At that time we had hooks on Punt Road - putting a freeway up Punt Road. Some amazing [freeway building] stuff was around, if you did a visual presentation, it would stun you. But [then Liberal Premier Henry] Bolte left the scene and [Liberal Premier Rupert] Hamer came, and he was as green as they come...

SI: ... Enlightened? ...

OK: ... Enlightened, yes, amazing; in creating the Little Desert [National Park]; the Land Conservation Council; brilliant stuff, but what you should be aware of – again, behind the scenes – is that the Board never told the government everything – that's how we believed it went.

SI: That's the Country Roads Board?

OK: Yes we had a three member Board, until [Labor Premier] John Cain came in and turned everything upside down; and he appointed 'cafeteria attendants' to the position of Board membership; and every man and their dog was listened to for a while; and it took the [roads] industry a long time to recover. Mind you we had some 'fascinating' solutions for the state of Victoria which was just as ridiculous in one way as what proceeded it, in terms of totally road focused. But then Roads Construction Authority (RCA) gradually re-established itself. [Premier] Cain came in and one of the consequences was that MMBW folded, and in that process, we got all of their [roads] staff, and we had to deal with that, and there were a lot of conflicts. In the mid-70s, the RCA, which was based on the old Country Roads Board (CRB), had its act together again – it was a powerful group. But what we used to say; and I used to be told: '*You go in there Oz with a hollow log*'. You go with your options and your money tucked into that hollow log, and you're not going to show it to anyone – this was our training. Now, I wouldn't be at all surprised to hear that the Government was in connivance with the old Country Roads Board: '*You just see how much you can get away with*'.

SI: This was under Cain?

OK: Not with Cain at the beginning, maybe later, but certainly Hamer, and certainly Bolte, who knew what he wanted to go on. What I'm saying is that our [Roads] Executive made us feel that Government didn't know anything, and so when John Cain came in, the Government didn't trust us, because we never told them the full story. However with hindsight I think that the Governments chose to remain ignorant, and let us get on with it, and hence we demolished the railways.

SI: We'll come back to the railways, but what you are suggesting is that Bolte was a powerful character and he was the one pushing a lot of this road development?

OK: Yes. I don't know what the political trade-off was but a lot of political stuff was going on - County Party included.

SI: But we had the first oil crisis in the 1970s and when Hamer came in there must have been some new ways of thinking with some good environmental ideas but did the Roads Board at the time have a different agenda?

OK: Yes. They will still going the old way. But in 1988 I tried to put in high speed rail [between Sydney and Melbourne].

SI: What blocked that?

OK: Basically the national economy didn't have the spare cash, and one of the champions of that, [Prime Minister] Bob Hawke, lost his influence. And I was working on high speed freight at one stage. I was working for the railways at that time, but only afterwards I found out that I was still be paid by the Roads Authority until 1993. I was being paid by VicRoads, in between I was working for the railways, two years at the university and for the Ministry ...

SI: ... But you were always being paid by VicRoads? ...

OK: I didn't know it. I got a 40 year gold watch.

SI: Were you sent into the railways on secondment?

OK: It was worse than that. I was promoted. Much to the chagrin of my colleagues at VicRoads. You see there are a lot of egos in the State of Victoria (and other places), this is not necessarily a negative, but these people are driven, they want *their* solutions. But, what we believed we were doing, and what I still believe I'm doing, is for the benefit of society. {Continued in #136}