

High Speed Rail Study

"The Government welcomes this study into high-speed rail by Infrastructure Partnerships Aust. ... What this report says is that we need to look at preserving the corridor from Brisbane right through to Melbourne in order to save costs for what is a long-term vision for high-speed rail down the east coast of Australia. We know that high-speed rail is making a big difference in Europe and in Asia. We know that there are challenges here in Australia because of the relatively small population compared with, say, China or Japan. ... We know that high-speed rail has a number of advantages. It can get people from A to B very quickly and conveniently; unlike air travel, it can put people right in the centre of a capital city; and it can also be part of the whole-of-government approach to tackling climate change. We know that rail is particularly climate friendly in terms of a form of transport. ...

"It's pretty clear that there's a lot of public support for high-speed rail, but before now it's been theoretical. ... What we need to do is put dollars next to this proposal and then have a debate in the community about whether they want it to go forward. I'm very confident that high-speed rail will be a part of Australia's transport and infrastructure future. What we need to do is make sure we get the planning right. ... We need to make sure that we get the economics of it right because it has significant benefits for our economy, for our environment and I think will make a big difference in terms of overcoming the tyranny of distance, which in a country such as ours has been such a challenge.

"This report indicates that [travel from] Sydney to Melbourne could be conducted in three hours. The advantage, of course, is that it could be Sydney CBD right in to Melbourne CBD with no waiting, as opposed to the time that air travel takes – waiting at the airport and travelling to and from the airport at either end. So it's pretty clear that there are a number of advantages that high-speed rail would have. ... The European experience shows that projects such as the Eurostar from London to Brussels and Paris has been extremely successful, has been extremely competitive because of the advances in technology which are there."

Ref: Anthony Albanese, Federal Transport Minister, 18/9/10

"But senior lecturer in transport planning at RMIT University, Paul Mees, expressed little faith that the feasibility study, which is the 10th study of its kind since 1984, would drive the development of the fast-rail link. 'What I find frustrating is the idea that we might be about to spend yet another \$20 million re-doing the engineering work that we've done nine times before and coming up with the same conclusions' Dr Mees said. 'I almost think that there's some kind of cargo cult mentality going on here, that if we just offer up enough studies to whichever law of universe supposedly grants favours, then somehow a very fast train will descend', he said."

Ref: Christopher Knaus, Canberra Times, 18/9/10

Time to Trim the Car Fleet

"In an attempt to reduce its impact on the environment, the Victorian Government pays \$500,000 for a 'vehicle offset program'. This negates about 30,000 tonnes of greenhouse gas emissions. ... There are about 8800 vehicles in the government fleet, including almost 5000 that run on unleaded petrol. The Greens have called for a new efficiency target and say a better way of reducing emissions would be to use fewer cars."

Ref: Matt Johnston, Herald Sun, 22/9/10

Time to Trim Cars from Adelaide CBD

"Adelaide should ban polluting vehicles from the CBD and open the window to a brighter, cleaner and greener city, our new professor of sustainable design says. UniSA Professor Steffen Lehmann, originally from Germany, said banning polluting vehicles from the city centre would trigger a fundamental shift in urban design. 'The city is an air-polluted, noisy environment, so you can't open the window but if we solve that problem, it allows us to build the city in a different way. This is very big and people haven't understood; they think it's just about driving electric vehicles. That is only one aspect and the consequences out of that are magnificent'. Fossil fuel-burning cars, trucks and buses would no longer be welcome in the 'square mile'. People would get around by walking, cycling, driving electric cars or hopping on free, zero-emission buses and trams. ...

"Professor Lehmann said 80% of city noise was due to traffic. 'Electric vehicles and bikes make no noise. You have a quiet city and you have fresh air. This allows us to have buildings that can open the

window. This is huge. It allows us to change, to transform the city to a naturally-ventilated place that is not dependent on airconditioning'. He said the number of people living in the central business district could 'easily double' from 25,000 to 50,000. At the same time, the city would dramatically reduce its carbon emissions. ... 'We need more people; we need more vibrancy. We need higher density – not high-rise, but four [or] five storeys.'

Ref: Clare Peddie, Adelaide Advertise, 22/9/10

Peak Oil and Climate Change

"Peak oil and climate change are on parallel paths. Both are inextricably linked and can only be solved together, requiring a shift away from a reliance on fossil fuels into what is now called the 'post-carbon economy'. ... A German ... report warns of market failures, huge tax rises, food shortages and widespread rationing. Oil is used in producing 95% of industrial goods, so the report predicts price shocks right through the supply chain. 'In the medium term, the global economic system and every market-oriented national economy would collapse', it says. ...

"The climate change-peak oil link is also made in a new Australia Institute study, *Running on Empty?* The peak oil debate. It says tackling climate change and peak oil together is necessary but complicated. On the demand side, for example, China and India have turned global energy markets on their heads and will account for 70% of new oil demand between now and 2030. More complications are added with technically feasible solutions that are climatically disastrous. ... It is a contentious decision, but tackling peak oil is likely to force governments to tackle climate change, giving them the political cover they need for those judgment calls. It will also require tough decisions on urban planning. The German city of Freiburg, for example, has bicycle lanes all over the city. It discourages car use by mandating parking in a few designated lots and has designed its public transport to allow even large families to live without cars. ...

"The reality is that politics will force hard decisions on peak oil. ... To tackle peak oil, the [Australian] government needs to implement the Henry review's recommendations to change the fringe benefits tax formula for company cars that potentially encourages drivers to clock up mileage, and introduce road congestion charges. It will also have to invest more in public transport, promoting alternative fuels and subsidised infrastructure for electric cars. These are politically fraught decisions, but tackling the issue when oil has peaked will be impossible. Global warming and peak oil can only be resolved together. Peak oil might provide governments with just the excuse they need to make tough calls on climate change."

Ref: Leon Gettler, The Age, 17/9/10

And Also ...

"Should the Popemobile be liable for the congestion charge and, if not, why not? Should the Holy Father have to pay £8 to drive through Westminster, like everyone else?"

Ref: Boris Johnson, Telegraph, The Age, 21/9/10

More on the Grand Prix

"As plummeting sales revenue for the Australian Formula 1 Grand Prix sends the event further into the major events mire, the race's official attendance, which makes up the vast proportion of the revenue figure, has grown, according to the event's organisers. The release yesterday of Australian Grand Prix Corporation's annual report made painful reading for Victorian taxpayers, when it was revealed they subsidised the event by a record \$49.3 million in 2010. Total costs for the race exploded to \$80.3 million and sales revenue tumbled 8.2% – from \$26.7 million to \$24.6 million. But according to counter-intuitive data reported by the AGPC, the Grand Prix's four-day attendance mysteriously rose 5.9% – from an all-time low of 286,900 in 2009, to 305,000 in 2010. Between 2005 and 2010, sales revenue – which includes general public tickets and corporate box positions – declined by 40.8%, while attendances have fallen by just 17.5%. ...

"The issue of rubbery attendance figures has plagued the GP for years, ever since its governing body claimed '401,000' spectators turned up for the inaugural race in 1996. Controversially, the AGPC does not provide turnstiles or barcoded tickets and instead relies on the total tickets distributed (regardless of

whether they are used), free ticket giveaways, 'visual estimates', and the counting of racing team staff and ancillary workers such as grid girls. ...

"Ben Doherty and Josh Gordon's award-winning [2008 Age report](#), which outlined the full extent of the subterfuge under the memorable headline 'Truth on crowd figures would hurt us, admits GP Chief', revealed that VCAT judge Marilyn Harbison had sighted the AGPC's methodology, but decided not to release it publicly because the event needed to be able to 'compete effectively in the marketplace'. Then Age editor Andrew Jaspan intervened after the report was published amid complaints from the AGPC, whose boss Ron Walker also chaired the newspaper's publisher Fairfax Media, and the online version still has a 200-word 'clarification' attached to its introduction as a memento."

Ref: Andrew Crook, Crikey.com.au, 17/9/10

And Also ...

"Some of the world's biggest motor manufacturers are in a race to develop an eco-car as good as a petrol- or diesel-run engine. Many of the contenders gathered in central London earlier as part of the Prince of Wales' Garden Party. The event is intended to highlight sustainable forms of travel. A host of famous names, including former racing driver Sir Stirling Moss and Dame Ellen MacArthur, drove a parade of green vehicles along The Mall to promote the eco-cars. On Friday, TV presenter Kevin McCloud and Mulberry creator Roger Saul, took part in a cross-country race driving electric-powered Californian Tesla supercars with a top speed of 125mph. They were also racing against the royal train carrying Prince Charles back to London from the Midlands after a four-day tour of the country promoting sustainable living."

Ref: Sky News, 13/9/10



"I'd heard that Stirling Moss had turned Green. But..."

Feedback

"Great newsletter as usual. Thanks. Through a couple of your newsletters recently, I'm starting to see a potential contradiction in some of our arguments. For years, we (PT advocates) have claimed that new roads induce new traffic, thus rendering any short term (time saving) benefits useless after a few years. This helps our case for investment in PT. However, the articles about the lack of use on the privately built roads is perhaps suggesting that induced traffic is perhaps not occurring as much as we would perhaps like to claim, potentially putting a hole in our arguments against new roads."

Alistair Ray, 22/9/10

Thanks for the comments and thanks for highlighting the issue. I try to report the logical arguments on the pros and cons of sustainable transport (and by implication good urban design). It is also important to hear what is being said in the public realm against good design and to try to understand what motivates such comments.

Rather than encouraging more congestion by building more private or publicly funded motorways, the articles have been included to highlight the folly of investing in such projects. They also demonstrate how governments and investors can be easily duped. We picked up the Clem7 road tunnel story under *More Congestion for Brisbane* in #150 (13/4/10) where even at that stage a con was being suggested. See the Index for the other articles.

Steve Ingrouille, 22/9/10

Problems Replacing Oil (Part 1)

"I had wondered that when oil became too expensive would people want to convert their food into biofuels to keep their cars going – an interesting trade-off. I know we eat too much, so that should not be such a problem. Then I realised that the rich (people and nations) would ask others to give up their food so that the rich could continue to drive. In a sense the Mexican food riots a couple of years back came through the USA converting corn into ethanol rather than sell it for export to Mexico to be made into tortillas. I did the sums a while ago about Australia's potential for biofuels, specifically converting our sugar cane into ethanol and our canola into biodiesel. It would only ever be a side-show as our oil

consumption is so large. ... Annual Australian sugar production is about 5 million tonnes, of which 4 million tonnes is exported at world market prices. The amount used for domestic consumption would be largely used for food and confectionary production or in existing ethanol production. If we convert all of the sugar that is normally exported to ethanol, then we have import substitution for oil. How much petrol would it displace?

"One tonne of sugar yields 489 litres of ethanol. The Australian export sugar crop (4 M tonnes) would then produce about 1.54 Megatonnes of ethanol (1.96 Megalitres). The annual consumption of petrol in Australia is about 20 gegalitres. To make all our petrol into a 10% ethanol blend would require 1.82 Gegalitres of ethanol. However, we would have saved not quite this amount of petrol. This is because ethanol delivers less energy than petrol (only two-thirds as much), so more of the ethanol/petrol blend will be consumed per kilometre. If we used cellulose waste instead of a food crop, it would have to be on the basis that the crop waste had no other pre-existing use, such as soil stabilisation or fertilisation.

"The annual diesel consumption in Australia is 15 Gegalitres. Australia's annual canola crop is variable, but is approximately 2 Mega tonnes, of which about 1.4 Mega tonnes is exported. If this crop was converted into bio-diesel, how much regular fuel would be displaced? If we changed our diet and used all of our canola to make biodiesel, we could take the 2 mega tonnes of canola grown in Australia in an average year, to yield $2,000,000 \times 0.4/1,000 = 800$ Mega litres of biodiesel. This is about 5 % of our annual demand for diesel fuel. What if we substituted just our canola exports to make biodiesel we would only get 70% as much biodiesel. That is $1,400,000 \times 0.4/1,000 = 560$ megalitres of biodiesel. This is under 4% of our annual demand for diesel fuel."

Peter Flanagan, 6/9/10

Portarlington Ferry Evaluation (Part 2)

"The raw estimate of 'latent demand' by Bellarine commuters for work or employment purposes on the proposed ferry service is 1,800 return trips per weekday, given a \$30 return fare, inclusive of public transport connections in Melbourne. This raw estimate is based on stated preferences (i.e. survey responses) and needs to be deflated due to several factors:

- Some people (e.g. trades people) need to carry equipment or samples.
- Others travel between worksites in Melbourne.
- Some work in parts of the city that are not readily accessed from Port Melbourne by public transport.
- Some workers need to travel outside the likely operating hours of the proposed ferry service.
- Others feel unsafe on public transport.

"Therefore, it is necessary to exclude from the estimate those whose work type, work location or hours require that they have access to a private vehicle or who, for reasons of perceived safety, prefer to avoid public transport. This capping process lowers the estimate to 800 return trips per day, still based on a \$30 fare.

Further, it is reasonable, in the experience of the authors with studies of this type, to assume that only 50% of this demand would actually be captured by the service, due to issues of awareness, convenience, practicality and timing. Thus, the best estimate of the likely level of demand for a commuter ferry service is 400 commuter return trips per day. ...

"There also appears to be demand for a ferry service from Portarlington to Melbourne from residents of the Bellarine Peninsula visiting Melbourne for a range of personal, leisure and social reasons, which has been estimated in the representative telephone survey conducted in August 2009 by Ipsos [the research company]. These potential trips would generally be outside peak travel periods. Ipsos estimates that around 13,000 trips are taken each week to Melbourne by Bellarine residents to visit friends and relatives, for sporting events, entertainment, personal appointments, social activities, shopping and study or education.

"Using a similar process to that outlined above in respect of demand from commuters, Ipsos estimates that the size of the potential non-commuter market on the Bellarine Peninsula for a ferry service between Portarlington and Port Melbourne is approximately 500 travellers per average day, again based on a \$30 return fare, inclusive of public transport connections in Melbourne. ... Any travel by accompanying children would represent an additional source of demand. Estimates of the likely

proportion of children travelling by ferry are not available but could be inferred from the passenger mix using existing methods of commuting as representing an additional 17%.

"In the longer term, 'latent demand' may be stimulated for leisure trips to the Bellarine Peninsula, where connecting transport is provided by local operators; or travel stimulated by festivals and special events. Ipsos considers these as longer term opportunities to stimulate demand for the ferry service, as they will involve product development and significant promotion and communications activities. For example, ferries be equipped with bicycle racks to generate additional revenue from those taking cycling holidays or day trips. If 5% of this 'latent demand' by Victorian adults for leisure and recreation trips on a proposed ferry service could be captured through ongoing campaign activity, this could equate to 2,100 return trips per week. It should be noted that this estimate was based on a \$20 return fare for adults used in the survey questionnaire and that a higher fare of at least \$30 seems likely. Such higher fares, or limited marketing activity, would reduce this demand." {Continued in #175}

Ref: Portarlington to Melbourne Ferry Service,

Parks Victoria, DoT, DPCD, Tourism Victoria and City of Greater Geelong, June 2010

http://www.parkweb.vic.gov.au/resources/mresources/port-arlington/Portarlington_Ferry_Report_June2010.pdf

Postcard from Europe

"When we went away to Europe earlier this year, I promised that I'd take some photos for the Newsletter.

"The guy in the poster from Brussels is basically saying: 'Brussels – Brussels by car, that was ridiculous'. This was on the side of the road, near an entrance to Central station.

"The other one is in the ticket hall of a Barcelona metro station, and says: 'Travelling by metro and bus, 3,299 citizens have saved 39,847 kilos of CO2'."

Andrew Dye, 22/9/10



How Deadly is Diesel? (Part 3)

"The Clean Air Task Force report cites numerous studies revealing that diesel soot:

- *Degrades the immune system (the system that protects us all from bacteria, viruses and cancers);*
- *Interferes with our hormones, reducing sperm production, masculinising female rats, altering the development of baby rats (changing their bones, thymus, and nervous systems), modifying their adrenal and reproductive hormones;*
- *Causes serious, permanent impairment of the nervous system in diesel-exposed railroad workers;*
- *Induces allergic reactions, not limited to asthma, causing children to miss thousands upon thousands of school-days — a primary cause of school dropout, consequent low self-esteem, and subsequent life- failure.*

"The new report is based on the most recent available data from the federal EPA (Environmental Protection Agency) combined with EPA risk models, with calculations carried out by Abt Associates, a consulting firm that frequently performs contract studies for the EPA.

The key findings of the report should come as no surprise. The dangers of breathing diesel fumes have been known for at least two decades.

"More than 20 years ago, numerous researchers confirmed and reconfirmed that they could cause lung cancer in laboratory animals breathing air laced with diesel fumes. To anyone taking a precautionary approach, this confirmed knowledge of diesel's ill effects on animals would have jump-started a search for alternative ways to power on-road and off-road machines, to phase out diesel in an orderly step-wise fashion. But the National Academy of Sciences did not take a precautionary approach. The New York Times reported Dec. 23, 1981, that the Academy acknowledged that diesel soot is known to contain suspected cancer-causing substances. But the Academy said, 'no convincing epidemiological evidence exists' that there is 'a connection between diesel fumes and human cancer'. In other words, let's not act

on the animal evidence – let's hunker down and wait until we can line up the dead humans. This is the risk-based approach to public health. It is the opposite of a precautionary approach.

"Twenty years ago, in the spring of 1985, the Natural Resources Defence Council (NRDC) issued a scientific report about the dangers of diesel fumes in New York. The New York Times reported May 18, 1985: 'Diesel emissions are probably the single most important air-quality threat in New York City today', said Eric A. Goldstein, a lawyer for the environmental group and an author of the report. 'But city, state and Federal agencies have not yet mounted a broad-based counterattack'. The Times reported then that a spokesperson for the New York State Environmental Conservation Department acknowledged that diesel fumes cause lung cancer in humans but, he said, the state was 'not yet sure' how big the problem was. The state had no plan for dealing with diesel because 'we have not identified the extent of the problem', he said. This is a classic example of the risk-based approach. Ignore the evidence so long as it is not 100% airtight. Use uncertainty as an excuse to delay. Wait for the dead bodies to pile up, then slowly acknowledge the need for action.

"By 1985, there was no doubt that dead bodies were piling up. But the exact number of corpses remained uncertain, so the risk-based approach allowed 'business as usual' to continue. From a precautionary perspective, knowing that a technology causes lung cancer, and knowing that hundreds of millions of people are exposed to it, just naturally kicks off a search for less-harmful alternatives. But no one in 1985 was taking a precautionary approach. In 1988 the federal government's Robert A. Taft Laboratory in Cincinnati published NIOSH report 88-116, officially confirming that exposure to diesel fumes causes lung cancer in humans.

"At this point the precautionary principle would insist that a search for alternatives begin. Other fuels? Other kinds of engines? Filters for trapping the fumes and soot? Innovative modes of transportation for moving goods and people? Other ways of planning city growth, to reduce reliance on trucks and buses? Electrified steel-rail mass transit? Maglev trains? Hydrogen? Steam? Compressed air? The alternatives are many.

A precautionary approach would focus attention on eliminating the problem rather than arguing over the exact body count." {Cont. in #175}

Ref: Rachel's Environment & Health News, Health and Energy, 24/2/05

http://healthandenergy.com/deadly_diesel_fumes.htm

And Also ...

"One of the world's largest oil companies has broken its pledge to stop funding groups that promote scepticism about man-made climate change. ExxonMobil gave almost £1 million (\$1.75m) last year to organisations that campaigned against controls on greenhouse gas emissions."

Ref: (The Times), The Australian, 20/7/10

Problems with Tar Sands (Part 3)

"Failing to curb our dependence on fossil fuels will create a world dramatically different than the one we're currently accustomed to; one in which sea level rise, extreme weather, and reduced resource supplies will not only cause irreparable harm to ecosystems around the globe, but also tremendous human suffering and conflict. We need to do our best to absorb the weight of that fact and incorporate it into our decisions.

"Avoiding these dire outcomes should be reason enough to begin transforming the way energy is produced and consumed, both in the United States and around the world. When I started the Centre [for American Progress] in 2003, driving this change became one of our founding missions. At the time, conventional wisdom suggested we'd picked a fight impossible to win. We believed then, and we believe now, that it can be won, and



that it must. And we continue to work tirelessly to help enact the policy changes we think are crucial to creating a clean energy future. But finding the right answers, and striking the right balances, as we transition – especially once you get down into the weeds of the issues – is not easy. When everything is hitched up to everything else in the universe, identifying priorities, making trade-offs, understanding both short- and long-term implications, diagnosing risk – all of these things are tremendously complicated. Add in a healthy dose of politics leavened with moneyed interests, and the task is even more daunting.

“Energy in particular is laden with these inter-connected issues. The role of nuclear power and natural gas are two that are easy to point to; the exploitation of tar sands, as we tend to call them, or oil sands, as you do, is also one. My own perspective on tar sands exploitation takes what I believe is the broader public interest – over the long term, not the short one – as a primary lens. Now is a good time to have this discussion. Today, tar sands oil accounts for 4% of America’s overall oil use, but will become our top source of imported oil this year, ahead of conventional Canadian imports and those from Saudi Arabia and Kuwait combined. Expert projections find that U.S. imports from tar sands could rise to as much as 36% over just the next two decades. As we look down this road, there are a few things it’s tough not to agree on at the outset. Oil extraction from tar sands is polluting, destructive, expensive, and energy intensive. These things are facts. I think suggesting this process can come close to approximating being ‘greened’ is largely misleading, or far too optimistic, or perhaps both. It stands alongside clean coal and error-free deepwater drilling as more PR than reality.

“Surface mining decimates an entire landscape, clearing away trees and animals along with the top layer earth. This process literally kills the landscape to recover the oil underneath. Toxic tailing lakes in Alberta now cover an area equivalent in size to Vancouver, or Washington, D.C., if you prefer, and pose a terrible threat to wildlife and, quite possibly, the health of people who live in their vicinity. Reclamation, even under Alberta’s relatively strict standards, remains a distant goal for most of the area disturbed. Surface mining is also extremely water intensive, and the Alberta government has granted permits allowing oil companies to divert enough water to sustain six cities of a million people for an entire year.

“Compared to the scorched-earth effects of surface mining, in situ mining is less destructive to the local environment. But that really isn’t saying that much. This technique has its own environmental consequences, including severe fragmentation of fragile habitats, loss of wetlands, decreases in wildlife, and groundwater contamination. And on top of these effects on the direct environment, in situ’s carbon footprint is nearly three times heavier than surface mining’s, which is a big and growing problem in an increasingly carbon constrained world. That results from the use of natural gas in the extraction process. The CO2 premium, if you will, I believe is a bit higher than James Rajotte suggests – perhaps 15% to 20% relevant to conventional oil. Let me make a note on what the CO2 goal here seems to be ... If developed countries need to reduce CO2 emissions by 80% by 2050, setting a goal of lowering oil sands emissions to come into line with conventional oil production is the wrong goal. The arrow is pointing in the wrong direction. Oil sands can’t simply be as good as conventional oil. We need to reduce fossil fuel use and accelerate the transition to cleaner technologies, in the transportation sector and elsewhere.” {Continued #175}

Ref: John Podesta, Climate Progress, 23/6/10

<http://climateprogress.org/2010/06/23/podesta-green-tar-sands/>