

Submission 3rd Track Epping - Thornleigh



Bottleneck Epping station: 4 tracks narrowing down to 3 tracks. The whole Northern line needs to be quadruplicated and very soon

Prepared by Matt Mushalik

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mushalik@tpg.com.au

3rd track design to be compatible with quadruplication

The whole Northern Line between Strathfield and Hornsby needs to be quadruplicated.

In chapter 4.4.2, page 75, it says:

The operational rail modelling also showed that a full quadruplication between Epping and Hornsby was not required at this stage. Rather, the key constraint exists in the northbound

Well, at which stage (in the world's oil-, climate- and Middle East history) are we?

We are at peak oil since 2005, a turning point in human mankind. We can see it everywhere. Oil prices have increased 3-4 fold. This triggered the financial crisis just as accumulated debt is also on a steep rise. As a result, economies are weak all over the world. Even in China, growth rates have come down. By 2014, Sydney will have no refinery. Chevron's petroleum sales – which are supposed to replace Caltex' local supplies - have declined for years. Now Autodom is closing after the downsizing of car manufacturing. In 2008 I advised then Industry Minister Kim Carr to re-tool car plants to manufacture components for the renewable energy industry. He did not want to listen. Mining projects have been shelved due to high oil prices. We see the implications of the end of the mining boom in the Federal budget, which will impact on financing important rail projects – while funds for highway duplication are wasted. Dreams of a very fast train, for example, should be buried. Peak oilers have warned for more than 10 years to prepare for this moment. No timely action was taken.

As this year's typhoon and hurricane season, in particular hurricane Sandy, has shown we are now going to get more and more extreme weather events. NASA climatologist James Hansen has shown that coal has only a future of 10 years, counting from 2010. We are at war with nature, a war we are going to lose. See Appendix E.

In another convergence, social unrest and armed conflicts are spreading very fast in the Middle East, in part also caused by peaking of oil production e.g. in Egypt, Yemen, Syria and Sudan. Iran is at its 2nd and last oil peak which is accelerated by sanctions. Former US Ambassador to Israel, Martin Indyk, predicts war in 2013 (see mine sweeping article in Appendix D). So it is only a matter of time until the combination of all these developments will result in either skyrocketing oil prices or physical oil shortages or both. We are going to see the end of our car- and truck culture in this decade.

So that is the stage in which we are in.

And the political "leadership" including top bureaucrats still hasn't understood all this and thinks they can continue business-as-usual. The Appendix A shows the mindset of top decisions makers.

From the above it follows that rail will have the function to REPLACE EXISTING oil and emissions intensive car and truck traffic as much as possible, not to provide for assumed freight growth under a business as usual scenario. The above thinking that we'll have many more stages in future when things can be done demonstrates that our planners have done little future scenario research.

Transport Master Plan

The Northern Freight Corridor project is part of the Transport Master Plan which is largely peak oil and global warming ignorant. See Appendix E and more details here: <u>http://crudeoilpeak.info/wp-content/uploads/2012/11/Submission-Transport-Masterplan-Matt-Mushalik.pdf</u>

SYDNEY'S RAIL FUTURE Figure 4.49 Sydney's Rail Future - How our rail network will look Honsby North Shore Full quadruplication required Biction Persmatts Figure 4.49 Sydney's Rail Future - How our rail network will look Monte Full quadruplication required Site Chatswood Site Chatswood Site Chatswood Fairlied Figure 4.49 Sydney's Rail Future - How our rail network will look

Fig 4.49 from the Masterplan, on which I have marked in red the line which needs quadruplication.

Already on 1/8/2006 I wrote a letter to then Prime Minister Howard - MP in Bennelong – that this project was very urgent in response to higher oil prices. My correspondence with him on peak oil extended over the whole of his last term, from 2004 to 2007. No action. Rudd/Gillard dto.

Epping station

When the EIS for the new station at Epping was on public consultation I submitted that Epping needed 4 above ground tracks. I was told a 4th surface track can be added later. I replied, no, we have peak oil and there won't be any funds then. Any modification now would of course be difficult because of the tunnels underneath the station. And the government wants to widen the road bridge Beecroft Rd – Epping Rd (instead of increasing the span for a 4th track) to accommodate the additional traffic generated by thousands of new residents in dozens of new high rises around the station – which is presented to the public as so-called transit oriented development. Then why should there be so many new cars in the area? This example shows how car-biased and inconsistent transport planning is in NSW.



The tunnel between Cambridge St and Beecroft Rd needs to remain open.





<<Although the bus ramp to the M2 was removed for the M2 widening (which will be bitterly regretted) the transport system will one day be thrown into an emergency in which buses from the North West will need to access Epping station once again from both sides. https://majorprojects.affinitylive.com/public/29ecc307fe666fa3c6f7574c2011e845a/02 Chapter Sa.pdf

This new bridge should provide for 2 additional tracks, not just one.



A https://majorprojects.affinitylive.com/public/cdd69bfb06f24b683d7846a3a036eacf/03 Chapters 5b to 7..pdf

Looking North. Shortsighted designs for 3 tracks only. Location of lift and concourse must accommodate 4^{th} track. The cross section below shows a museum type diesel loco (and in the wrong direction). This reveals the mindset of planners. Although the documentations says the 3^{rd} track will be electrified (so it can be used by the Newcastle express) they do not intend to electrify the whole rail system (at this stage, anyway!)



Provided we don't export all our gas perhaps we can do LNG conversions. http://crudeoilpeak.info/solutions/lng-locomotive-conversion



View from the pedestrian bridge at Thornleigh station looking towards Pennant Hills. The Western platform at Thornleigh station has just been rebuilt, ignoring the continuation of the 3rd track at the Wells St road bridge towards Hornsby. Planners just cannot imagine that a substantial part of traffic now on Pennant Hills Rd will have to go on these tracks when our oil based car & truck culture comes to an end. In other words, the number of freight trains for 2026 in table 5.4 on page 106 will come much earlier.

I participated in the hearing for the F3-M7 corridor study in Parramatta Court and the Chairwoman Mahla Pearlman mentioned in her final report my submission and the problem of future oil supplies. http://www.infrastructure.gov.au/roads/F3toM7Review/index.aspx



The construction period is almost 4 years, let us assume from 2013 - 2016. It is unlikely that peak oil will evolve peacefully during that period. All diesel intensive activities like earthworks should be completed ASAP. I also recommend the project build up its own diesel storage capacity so that works don't get disrupted when there are diesel shortages. The project office should be located as close as possible to the rail corridor to reduce transport problems (refer chapter 5.7.3)

Climate change (table 6.1)

The projected impacts may come much earlier as the Arctic sea ice is melting fast, which will change the world's albedo and many other weather/climate parameters like salinity and currents in oceans, moisture in the atmosphere, wind direction etc. There are reports that hurricane Sandy was at least partially caused by jet stream changes on the Northern hemisphere.

http://minnesota.publicradio.org/collections/special/columns/updraft/archive/2012/11/did_rec_ord_arctic_sea_ice_loss.shtml



Although this is not within the terms of reference of this project, Railcorp needs to look at the alignment of the whole rail line Sydney – Newcastle – Brisbane and conduct storm surge modelling. Also, The NSW government has to stop boosting coal exports which will contribute to global warming (in a non-linear way). See Appendix E.

Lift design

If the lifts are small like at the Epping station pedestrian bridge, there need to be 2 doors (ground level and upper level entry/exits on different sides) so that wheelchairs and bikes can be moved in and out in the same direction. This is a design snag and shows that planners themselves never use the facilities they are providing, possibly because they are using a government funded car.

NWRL not being built

What happens when the NWRL is never built, Transurban goes into receivership and a rail line has to be built on the M2 (Transperth solution). Where will be the interchange?

Appendix A Mindset of decision makers

Budget Estimate hearings 16/10/2012

🛞 www. aph.gov.au/Parliamentary_Business/Senate_Estimates/Estimates_daily_programs				
PARLIAMENT of AUSTRALIA		Skip to content Log in Contact Help هې Advanced Search		
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Chamber documents	Estimates daily programs			
Rural and Regional Affairs and Transport (PDF 32KB) Agriculture, Fisheries and Forestry: Monday, 15 October 2012 Infrastructure and Transport: Tuesday, 16 October 2012 Regional Australia, Local Government, Arts and Sport: Tuesday, 16 October 2012				

Infrastructure Australia Secretary http://www.infrastructure.gov.au/department/about/secretary.aspx



https://www.infrastructure.gov.au/department/about/files/OrganisationChart23Oct2012.pdf

Mr Mrdak:The reality is that if we are seeing more traffic on motorways, isn't that a good outcome, in the sense that we are seeing more activity, more development, more economic activity?

PDF http://tinyurl.com/9n38ygp



Up with those traffic estimates for road tunnels: Former Premier Nick Greiner and now INSW boss

"What happened is you got a substantial gaming effect where between the banks, the engineering consultants, the traffic consultants, the construction companies, everyone tried to get their patronage estimates up and get the banks to fund these estimates, because that's how you won , and that's how you could pay whoever the State treasurer was lots of money upfront. So, yeah, it is the case that Bilfinger Berger was in that project and lost money on it. I don't.. that's actually a qualification, dare I say it, for my involvement in this position" http://www.abc.net.au/news/2012-09-07/user-pays-fix-to-the-provide-transport-billions/4249622?section=nsw

F3 Freeway Castle Hill M2 Epping Tunnel Ryde North Sydney Westlink M7 Sydney Harbour Bridge and Tunnel Cross City Tunnel Bondi Junction Distributor Eastern M5 East Bankstown M5 Rockdale Hume Highway Hurstville Sydney's orbital motorway network Other motorways/freeways

Here is the game:

11/11/2010 Tollopoly on Sydney's orbital http://crudeoilpeak.info/tollopoly-on-sydney%e2%80%99s-orbital

Appendix B

Previous Submissions on Rail projects

I have written numerous submissions on transport all of which were ignored.

20/5/2012 Submission on NWRL

http://crudeoilpeak.info/wp-content/uploads/2011/02/Submission-on-NWRL.pdf

30/4/2012

NSW Transport Master Plan debates conventional peak oil 2006, assumes continuing oil age <u>http://crudeoilpeak.info/nsw-transport-master-plan-debates-conventional-oil-peak-2006-assumes-continuing-oil-age</u>

8/3/2010 Submission to the Inquiry of the Sydney Morning Herald <u>http://www.crudeoilpeak.com/?p=1231</u>

7/10/2009 Too late for Sydney Metro Tunnels <u>http://crudeoilpeak.info/too-late-for-metro-tunnels</u>

450 million dollars alone were wasted on the Mini Metro to Rozelle. I should have charged a consultancy fee of 1 per mille for every dollar saved. The North West Rail Link tunnel is the next candidate.

Sydney possibly holds a record of writing transport plans which have never been started, let alone implemented. A common feature of these plans is their attractive names like "Action for Transport", "Fast Rail" "Rail Expansion Programme", assorted "West-, North West and CBD Metros", "Transport Blueprint" and "Metropolitan Transport Plan". A good summary is here: <u>http://en.wikipedia.org/wiki/Proposed_railways_in_Sydney</u>

Selected articles on the destiny of the M2

14/8/2012 Transurban does not pay back its debt http://crudeoilpeak.info/transurban-does-not-pay-back-its-debt



⁽²⁾ Higher tolls to pay for widening the M2- Windows Internet Explorer What happens when a \$6 toll is introduced on the M2?

12/2/2012 Car addicted Sindney destroys bus ramp near rail hub as tollway debt increases 60% at least <u>http://crudeoilpeak.info/car-addicted-sindney-destroys-</u> <u>bus-ramp-near-rail-hub-as-tollway-debt-increases-60-pct-</u> <u>at-least</u>

End of car culture or how to compete with 14 million new Chinese cars every year

31/8/2011 1 billion vehicles in year #7 of peak oil http://crudeoilpeak.info/1-billion-vehicles-in-year-7-of-peak-oil Appendix C

Quote from the Transport Master Plan: "A well-planned freight and logistics network is particularly important to regional NSW."

Read my report on the reality of a train trip to Armidale:



Armidale: grass over tracks and the end of the rail world

28/5/2012

NSW regional railway clock stopped at midnight but Hunter coal trains are rolling <u>http://crudeoilpeak.info/nsw-regional-railway-clock-stopped-at-midnight-but-hunter-coal-trains-are-rolling</u>

XPT trip Sydney - Melbourne



and continued by bus>>

<< trip to Melbourne ended in Goulburn ...



5/12/2011

Australian intercity rail run-down and unprepared to replace domestic flights after peak oil <u>http://crudeoilpeak.info/australian-intercity-rail-run-down-and-unprepared-to-replace-domestic-flights-after-peak-oil</u>



Yes, this is the main rail line Sydney – Brisbane South of Coffs Harbour. Shame on consecutive NSW governments and generations of transport Ministers.

Read my report here:

1/4/2009 XPT Sydney-Coffs Harbour vs. Pacific Highway Upgrade <u>http://www.crudeoilpeak.com/?p=479</u>

And that's how it should be:



Additional track work between Munich and Augsburg



Express freight train (right, on passenger track) overtaking slower freight train loaded with truck trailers <u>http://www.youtube.com/watch?v=VZC9LeYlCNc</u>



Appendix D A lot of peaks from BITRE report 117

24/2/2012

Australian Government kicks own goals in Senate peak oil debate (peaky leaks part 3) <u>http://crudeoilpeak.info/australian-government-kicks-own-goals-in-senate-peak-oil-debate-peaky-leaks-part-3</u>





<< The decline of Iranian oil production – speeded up by sanctions – will not evolve peacefully. We are already in the stage of proxy wars and it will get worse.

Britain has rebuffed US pleas to use military bases in the UK to support the build-up of forces in the Gulf, citing secret legal advice which states that any pre-emptive strike on Iran could be in breach of international law. The Guardian has been told that US diplomats have also lobbied for the use of British bases in Cyprus, and for permission to fly from US bases

on Ascension Island in the Atlantic and Diego Garcia in the Indian Ocean, both of which are British territories. <u>http://www.guardian.co.uk/world/2012/oct/25/uk-reject-us-request-bases-iran</u>

27/7/2012

After Sydney's refinery closure: Caltex to import fuel from Chevron's shrinking sales



http://crudeoilpeak.info/after-sydney-refinery-closure-caltex-to-import-fuel-from-chevronsshrinking-sales

24/8/2012 BHP Billiton's Australian oil reserves in long term decline http://crudeoilpeak.info/bhp-billitons-australian-oil-reserves-in-decline



Shell filling station on Pennant Hills Rd: going (left) and gone (right) It is likely that many more filling stations will close as is already happening. This means that petrol lines at the remaining stations will be longer.



<< angry motorist pointing at a 6-mile long petrol line after hurricane Sandy knocked out power supply for petrol pumps.

Nothing new for me: Sunday driving bans: <u>http://crudeoilpeak.info/oilcrisis-1973</u> Long lines at filling stations: <u>http://crudeoilpeak.info/my-</u> experience-oil-crisis-1979

Similar scenes will be commonplace when peak oil and global warming converge to a messy physical problem. At present, governments do the opposite of what is required to avoid this.

Why the Transport Masterplan is dangerous:

Quote: This means the coal freight task will grow from 170 million tonnes in 2011 to nearly 370 million tonnes in 2031. It will be NSW's largest export commodity and rail network activity for the foreseeable future.

Comment: How naïve. It seems the authors of this chapter cannot foresee the global warming future. As already mentioned above, nature will not allow us to burn all that coal. Moreover:





<< Every coal ship will generate future compensation claims for loss of property and life caused by global warming, on a pro rata basis of CO2 emissions and shared benefits obtained by producers and users of the coal. If NSW or coal producers now argue for high economic benefits this information will be used to increase claims. A shot in the foot.

Again climatologist James Hansen:

"For most of 20 miles there were trains parked, engine to caboose, half of the cars being filled with coal. If we cannot stop the building of more coal-fired power plants, those coal trains will be death trains – no less

gruesome than if they were boxcars headed to crematoria, loaded with uncountable irreplaceable species."

http://www.columbia.edu/~jeh1/2007/IowaCoal 20071105.pdf



Figure 3. Frequency of occurrence (vertical axis) of local June-July-August temperature anomalies (relative to 1951-1980 mean) for Northern Hemisphere land in units of local standard deviation (horizontal axis). Temperature anomalies in the period 1951-1980 match closely the normal distribution ("bell curve", shown in green), which is used to define cold (blue), typical (white) and hot (red) seasons, each with probability 33.3%. The distribution of anomalies has shifted to the right as a consequence of the global warming of the past three decades such that cool summers now cover only half of one side of a six-sided die, white covers one side, red covers four sides, and an extremely hot (red-brown) anomaly covers half of one side... http://www.columbia.edu/~jeh1/mailings/2012/20120811 DiceDataDiscussion.pdf



When the Arctic sea ice disappears in this decade, there will be some surprises. It will mean the end of our coal culture.



Up: Parabolic trend of Aug/Sep Arctic sea ice volume towards zero in this decade. From the early warning blogspot.

http://arctic-news.blogspot.com.au/2012/08/diagram-of-doom.html



<< track work for coal trains in the Hunter. What should be done for the main rail line Maitland – Brisbane, is done for the wrong purpose to access coal fields.

Nature will throw more storms like Sandy at us and then it will dawn on people that we can't continue to increase CO2 concentration in the atmosphere. So this superfluous trackwork will be a total write-off. Sleepers and rails can be re-used elsewhere, fortunately

8/3/2010 NASA climatologist James Hansen at Sydney Uni: "Australia doesn't agree now that they got to stop their coal, but they are going to agree. I can guarantee you that within a decade or so because the climate change will become so strongly apparent that's going to become imperative" 20 seconds clip:

<u>http://www.youtube.com/watch?v=qMD2sd0lPeg</u> <u>http://www.usyd.edu.au/sydney_ideas/lectures/2010/professor_james_hansen.shtml</u>



http://www.bloomsbury.com/us/storms-of-my-grandchildren-9781608195022/

Appendix F The Asian Century

The Asian Century will last as long as oil imports can be increased: Crude oil production in South East Asia has peaked a long time ago. That's why the Tapis oil price is so high.



10/9/2012 South East Asian oil peak in the rear view mirror http://crudeoilpeak.info/south-east-asian-oil-peak-in-the-rear-view-mirror-part-1



There are a lot of claimed reserves (l) in the books. But what matters is annual oil flows (r)

12/8/2012 BP Statistical Review 2012 (part 3): the incredible growth of oil(y) resources http://crudeoilpeak.info/bp-statistical-review-2012-the-incredible-growth-of-oily-resources

HAPPY MOTORING