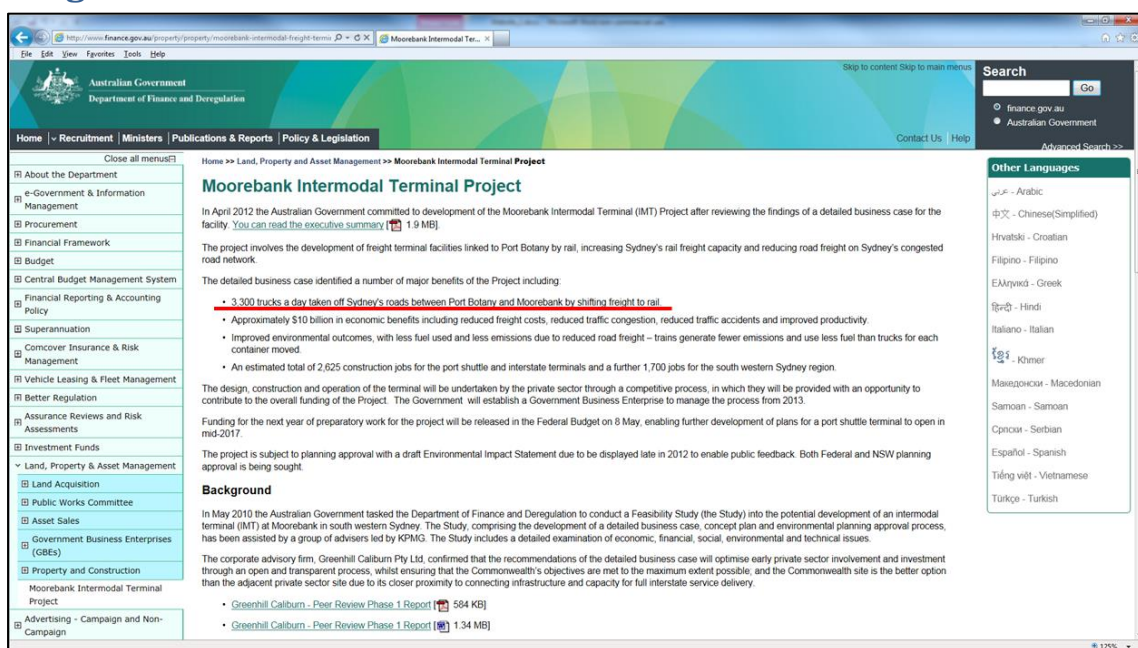


The Moorebank Intermodal Terminal has been in the planning process for many years. This is the one of the most significant Federal and State Governments signature projects.

This is a screen shot of the Australian Government web site when it first started under the Labour Government. It states the benefits of the project perceived at that time. Now that the EIS has been produced, these benefits can be checked using the facts from the EIS.

This project fails in every aspect for both the Federal objectives and NSW Government reasons.

First item: (and implied most important item) **3,300 trucks a day taken off Sydney's roads between Port Botany and Moorebank by shifting freight to rail.**



In the MICL EIS, the following two figures are published which contradicts this point: there will be very large truck movements between Moorebank and Port Botany.

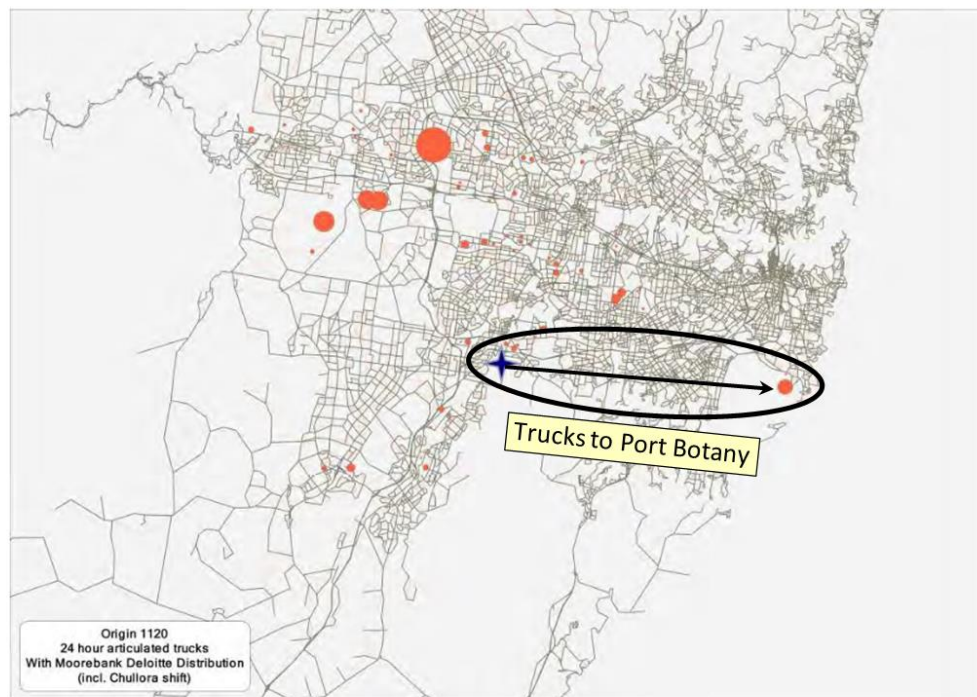
Table 3.6 shows the “Project Case”, that is, Moorebank is operational.

The size of the orange dots represents the number of truck movements.

This figure clearly shows that trucks travel from Moorebank Intermodal Terminal to Port Botany. In fact, from the size of the orange dot, Port Botany is one of Moorebank's major destinations!

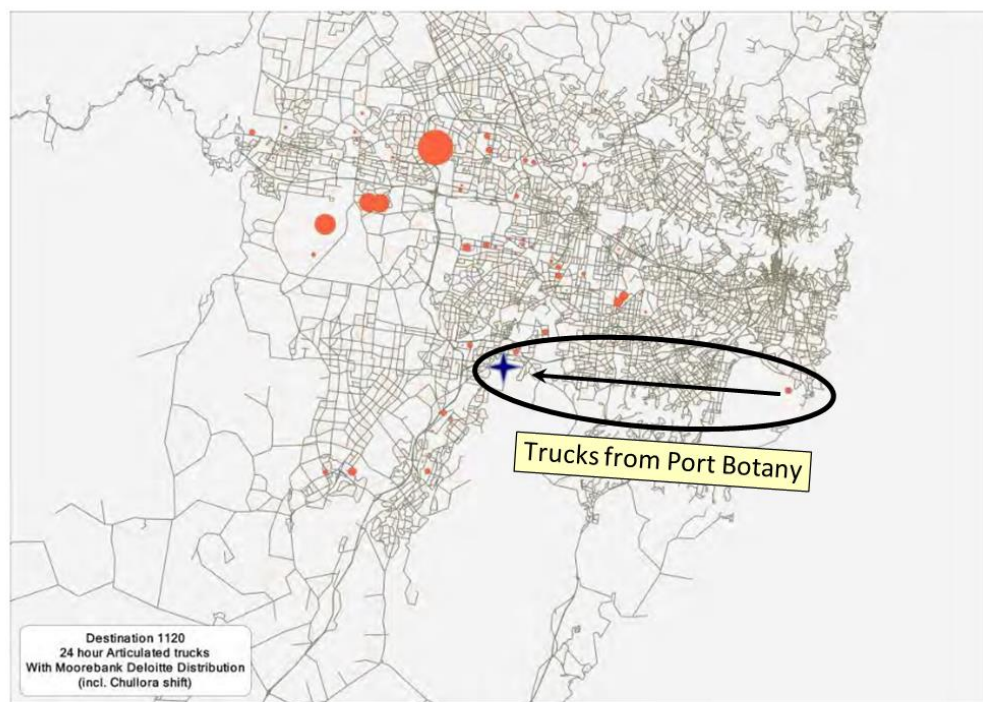
Table 3.6: 'Project Case' articulated truck distributions to/from Moorebank

From Moorebank



The same conclusions can be applied to the trucks from Port Botany.

To Moorebank



The “Base Case” has been modelled very poorly, to the point that it is totally misleading.

Facts:

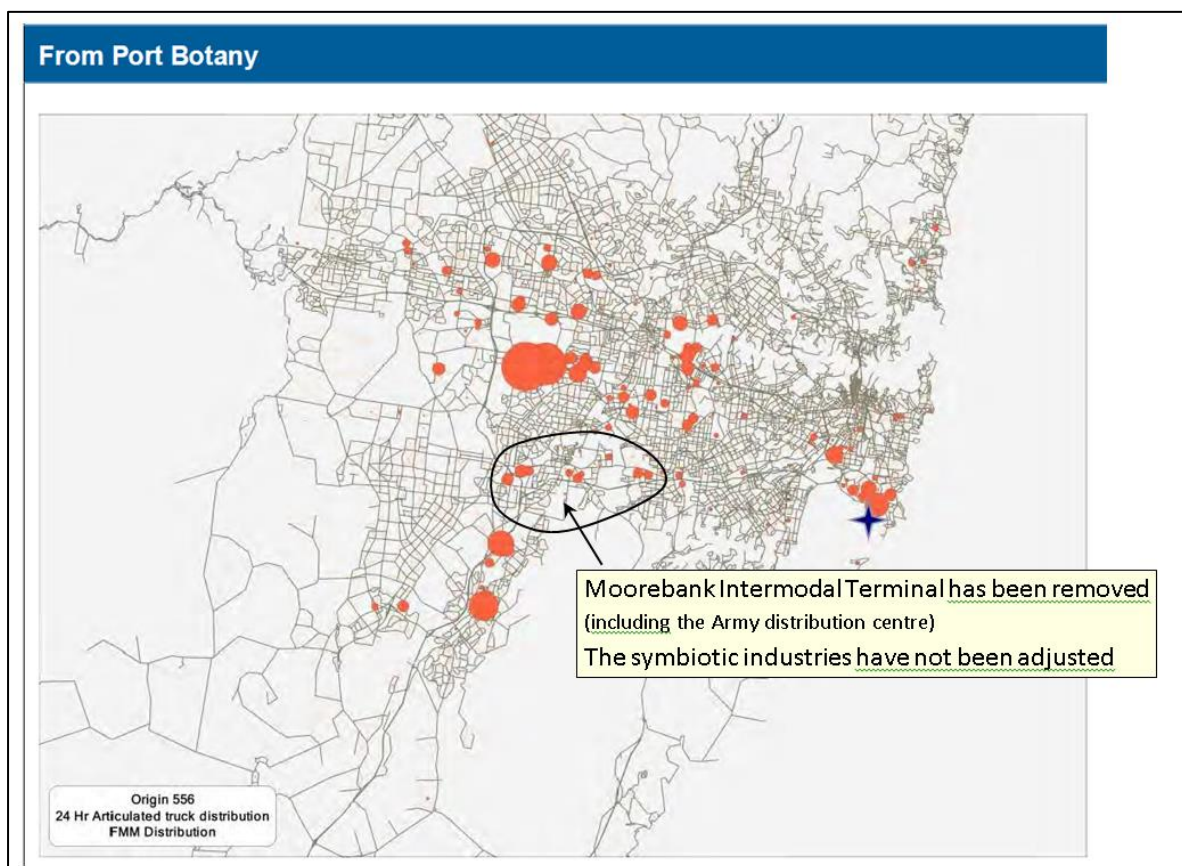
- Currently, in the Moorebank / Liverpool region, the largest importer/exporter is the Army distribution centre situated in Moorebank. It is very small.
- The current NSW Freight model includes all the symbiotic industries that mushroom up surrounding the Intermodal.
- If an Intermodal is factored out, intuitively, the freight movement between that Intermodal and its symbiotic industries must be adjusted appropriately.

The MIC modellers have factored out Moorebank to reverse engineer the “Base Case”. However, the MIC EIS clearly shows that the symbiotic industries surrounding the Moorebank Intermodal Terminal have not been adjusted. This gives the false impression that there are significant movements from those symbiotic industries in and around Moorebank/Liverpool area.

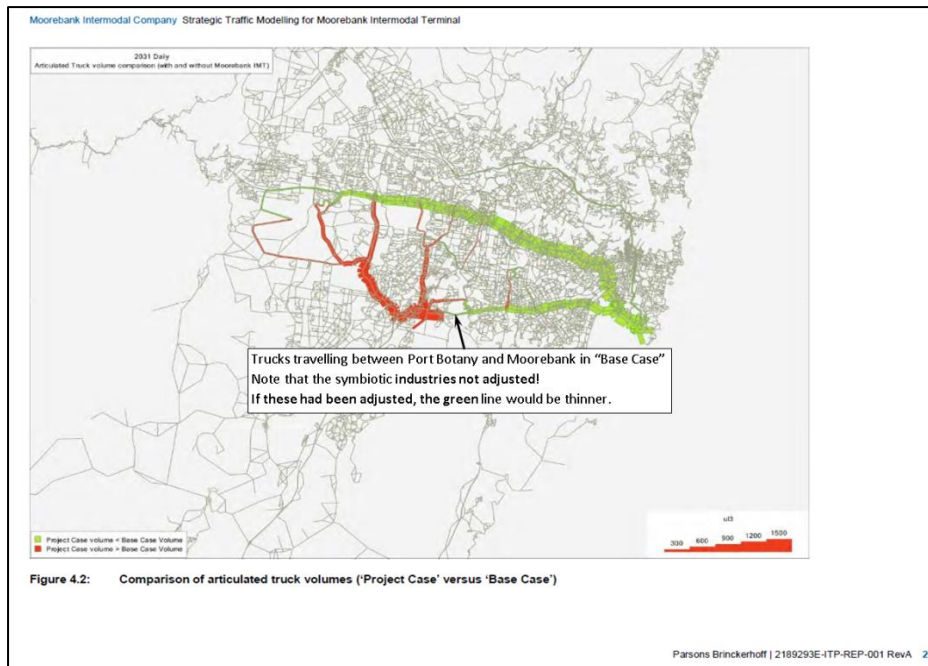
If this is a genuine oversight, it should be corrected.

If this is deliberate action, then its good corporate citizenship, professional morals and ethics that need to be questioned.

It is a well-known that the freight industry has rejected the Liverpool region because of its chronic traffic issues. This can be observed from the figure below – taken from Table 2.11. There are no large dots around Liverpool – those dots appear to be large because they have not been adjusted.



The figure below shows an approximated flow between Port Botany and Moorebank.

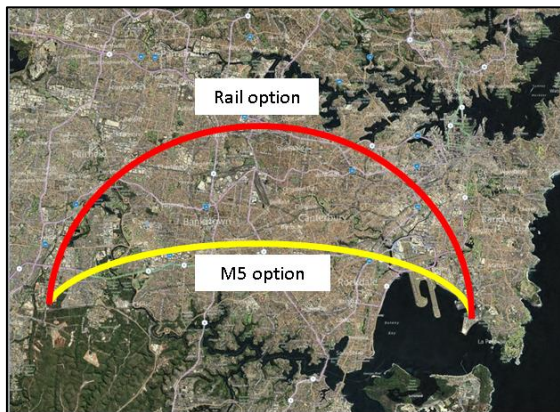


Conclusion: The following image shows very clearly that it is impossible to take 3,300 trucks off between Port Botany and Moorebank.

Second item: Approximately \$10 billion in economic benefits including reduced freight costs, reduced traffic congestion, reduced traffic accidents and improved productivity.

The economic modelling is grossly flawed in two areas:

- (1) it only considers the rail side and ignores the road side, and
- (2) it assumes that Moorebank Intermodal Terminal already exists.



The limit of the economic analysis: transfer the road freight to rail.

The economic analysis considered the reduction of the truck traffic at the Port Botany end of the trip, it failed to consider the impacts at the Moorebank end. It has simply assumed that Moorebank already operates satisfactory.

The economic analysis assumes that Moorebank Intermodal Terminal already exists:

- all the traffic from the largest Intermodal Terminal in Australia ever to be built, can fit on a two-lane (one lane in each direction) road.
- This two-lane road does not need to be upgraded until 2029/30.

This page has been scanned in from the heavily redacted Department of Finance and Deregulation, Moorebank Intermodal Project, Detailed Business Case, 6 February 2012.

the northern end of the site, the IMEX and interstate trains would share this connection.

- **Road access** – the Project is expected to require the widening of Moorebank Avenue to a four-lane carriageway. The design caters for additional turning lanes to accommodate the increased traffic volumes estimated to occur in 2029/30.
- **Internal roads** – the site layout provides two access roads located at the northern and southern ends of the site. The northern access is south of Anzac Road and is provided for heavy vehicles generated by IMEX, Interstate and warehouse traffic.
- **Truck parking** – the concept design also allows for a “trouble truck” parking area to investigate incidents. The trouble truck parking area would be able to accommodate up to 25 trucks at any given time.
- **Warehousing traffic access** – light vehicles would access the warehouse developments directly off Moorebank Avenue. Heavy vehicles would use northern and southern access points and a warehouse access road parallel to, and west of, the Moorebank Avenue.
- **Landscape design** – the landscape design solution for the Moorebank IMT would maximise the integration of terminal facilities and the associated warehousing precincts by providing screening, breakout space, visual relief etc. Along the Georges River side of the site, the landscaping incorporates the Ecologically Sustainable Development (ESD) initiatives proposed to conserve the existing riverside and the former earthmoving operations training area.
- **Empty container storage area** – the concept design provides adequate empty container storage areas for the IMT. The loaded IMEX container storage can accommodate 6,775 TEU (including Reefer container storage), and the empty IMEX container storage can accommodate 7,200 TEU. The Interstate container storage area can accommodate 1,450 loaded TEU (including Reefer container storage) and 2,200 empty TEU.
- **Utilities** – adequate utilities (electricity, gas, water and sewerage) and water management measures would be provided.

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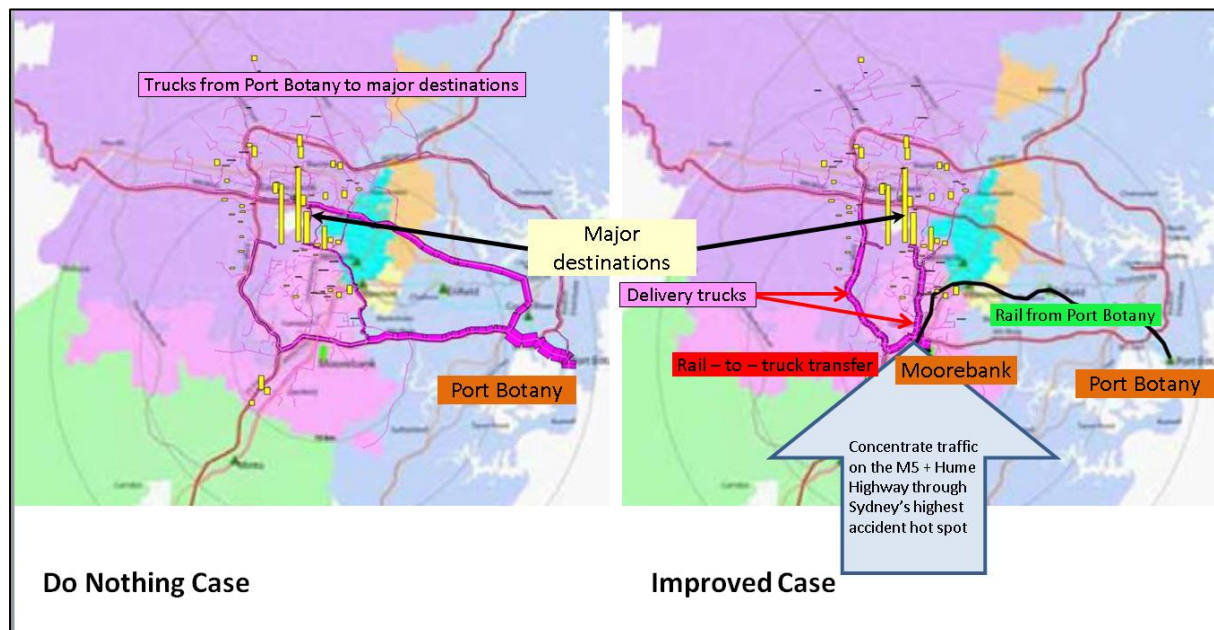
Any non-economist would wonder how could all the trucks from the largest Intermodal in Australia, could travel on the 2-laned Moorebank Avenue. Any local resident would point to the fact that Moorebank Av currently runs near capacity with background traffic.

Traffic engineers will have difficulties if they had to add all the additional Intermodal traffic onto Moorebank Avenue, because that is a very significant task. In the Detailed Business Case, the economists have assumed that the Terminal exists and operates satisfactory.

A proper economic analysis should use a realistic “Base Case”, (sometimes also known as the “Do nothing case”) and genuine “Improved Case”.

For this analysis, the Base Case is shown schematically on the left side of the figure below. Trucks travel from Port Botany to the final destinations. These destinations are shown as the yellow bars, and their height representing the number of truck movements.

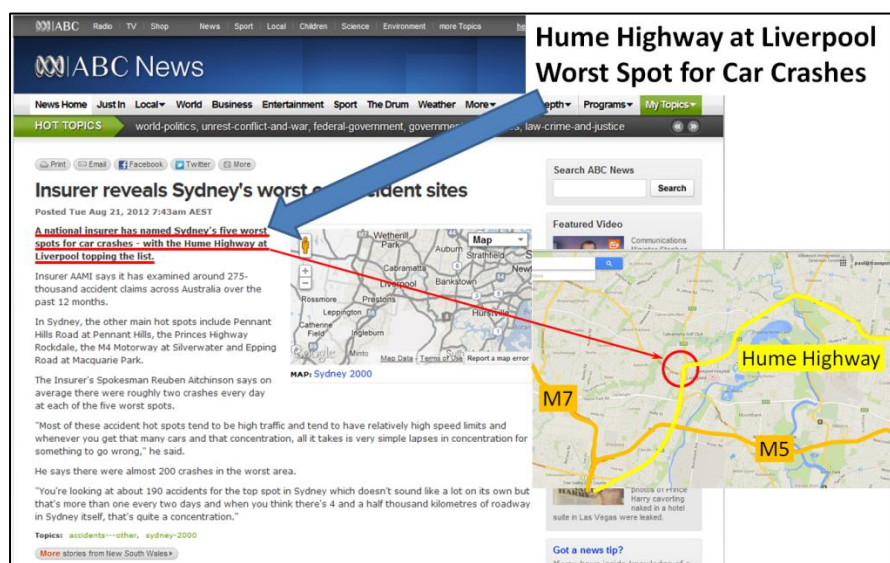
The Improved Case is shown on the right side. Rail carries the containers to Moorebank, where these will be transferred onto trucks. The trucks will then carry the containers to the final destinations.



From the Improved Case it can be observed that the trucks will start from Moorebank and use the M7 and Hume Highway.

The traffic impacts from such an operation has not been fully studied either by SIMTA or MIC.

The Hume Highway has Sydney's worst accident spot.



The MIC EIS shows that 25% of all its trucks will travel through this accident spot. (SIMTA estimated 27%, which is in the same order of magnitude). When two different studies yield very similar outcomes, the reader can be very confident that the number is close to the correct answer!

Narelle and Paul van den Bos have given presentations to SIMTA, MIC and numerous NSW Government Departments. These presentations have shown the totally inadequate level of modelling work that has been carried out for the largest Intermodal Terminal ever to be built in Australia.

Narelle has written two books on this issue. Here are the links:

“Moorebank Intermodals Key Assumptions Require Closer Scrutiny”

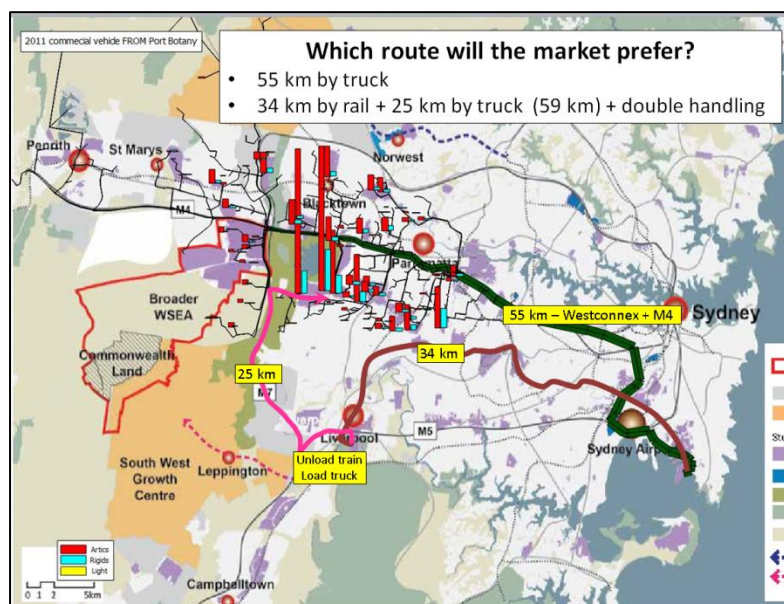
http://lcit.com.au/wp-content/uploads/2013/06/Intermodals_Book_Web_V19.pdf

“Moorebank Intermodal, Better Options”

www.transportmodelling.com.au/Intermodal/MoorebankIntermodal_BetterOptions.pdf

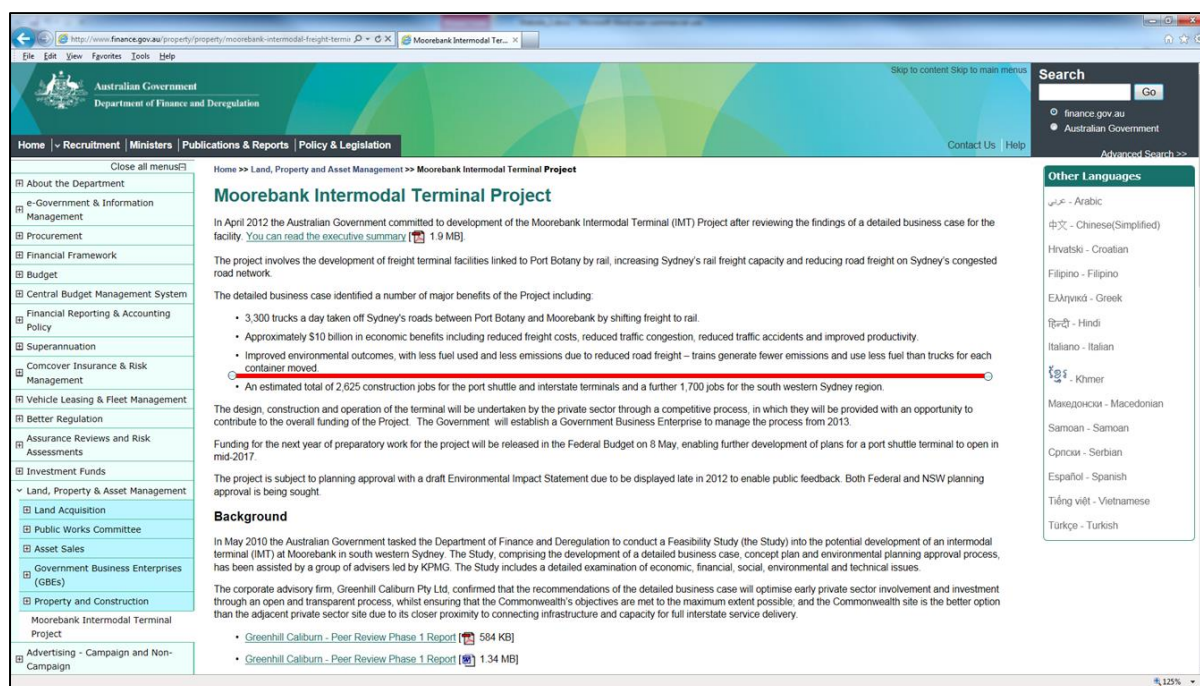
This second book, Table ES1 shows the list of 34 network improvements that other organisations have identified as requiring upgrading.

The following image conceptually illustrates the “improved productivity” from this scheme. It shows that the rail + truck mode will have difficulties competing with the truck only mode. The rail + truck mode will have to travel 4 km further, and the additional cost and time penalty for double handling at Moorebank.



Conclusion: Clearly, the \$10 billion in economic benefits is fanciful.

Item three: Improved environment outcomes, with less fuel and less emissions due to reduced road freight – trains generate fewer emissions and use less fuel than trucks for each container moved.



Surprisingly, given that this objective is so important, it has not been studied holistically, by either SIMTA or MIC. In both cases, it has been studied in a similar fashion as the economic modelling – very badly.

Therefore, only an incomplete concept of the issues can be collected, by combining information from two sources (the rail component between Port Botany and Moorebank, and what happens on the road).

What happens on the rail:

[Craig Kelly's speech: "Infrastructure Australia Amendment \(Cost Benefit Analysis and Other Measures\) Bill 2014"](#)

<http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;adv=yes;orderBy=customrank;page=5;query=Craig%20kelly;rec=3;resCount=Default>

Quote: "I had the Parliamentary Library do some research for me in this area. For a truck built after 2007—a truck that is getting towards seven or eight years old—compared with the diesel trains we are using, the diesel trains have 20 times more particulate pollution. So, what we will do for every container we take off the road and put on the rail, to move it from Port Botany to Moorebank, is increase the particulate emissions 10-fold. Why is this important? Already in Western Sydney and throughout New South Wales there are over 1,000 deaths a year attributed to particulate-matter air pollution."

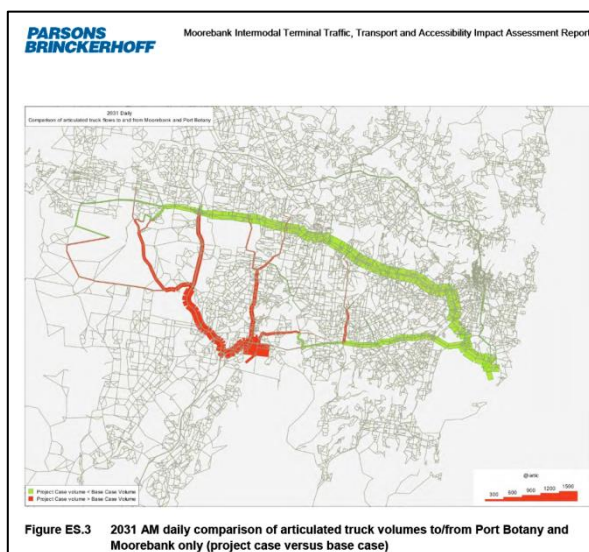
What happens on the road (from MIC EIS):

Wider network impacts

Strategic modelling using Bureau of Transport Statistics (BTS) models undertaken indicated that by 2031, metropolitan Sydney would experience the following network-wide benefits of transferring containers to Moorebank by rail:

- a saving of approximately 56,125 truck vehicle kilometres travelled (VKT) per day; and
- a saving of approximately 1,265 truck vehicle hours travelled (VHT) per day.

This is accompanied by a daily saving of approximately 2,530 VHT by non-truck traffic across the Sydney road network. The vehicle kilometres for non-truck traffic would increase by approximately 10,670 VKT. This is probably caused by traffic migrating from adjacent routes which are more direct, but more congested, to take advantage of the reduction in the truck numbers and congestion along the M5 and the other routes, as indicated in Figure ES.3.



While these numbers look impressive, a little caution needs to be exercised.

Network speed:

From these statistics, it is easy to determine the average network speed: $56,125 / 1,265 = 44.4$ km/hr for those affected trucks.

- During the AM and PM peaks, the network runs at an average speed of 30 km/hr. These two periods represent five of the 24 hours day.
- During the Inter Peak, that is the six hours between 09:00 and 15:00, the network runs in the middle to higher 30's km/hr.
- Even with the slighted amount of traffic, say late evening, the strategic network operates in the low 50's km/hr.

Given the travel time profiles in the EIS, this implied speed of 44.4 km/hr appears to be on the high side. Were they running on an empty network – that is, no cars were travelling on the network?

Impact on non-truck traffic:

The same calculations can be done for the non-truck traffic: $-10,760 / 2,530 = -4.2$ km/hr.

In other words, in the Project Case, the net impact for the affected cars (all the red links in Figure ES2) will have a reduced speed of 4.2 km/hr.

It is unfortunate that in the MIC EIS, the VHT and VKT figures are not given. This would have allowed the reader to calculate the average reduced speed reduction for the 14,223,413 drivers in the model. Why did MIC not publish these standard network statistics?

Summary

(1) Trains generate more particulates.

(2) Sydney's whole network will run slower, and therefore more fuel would be consumed, more pollution will be generated and there will be more accidents.

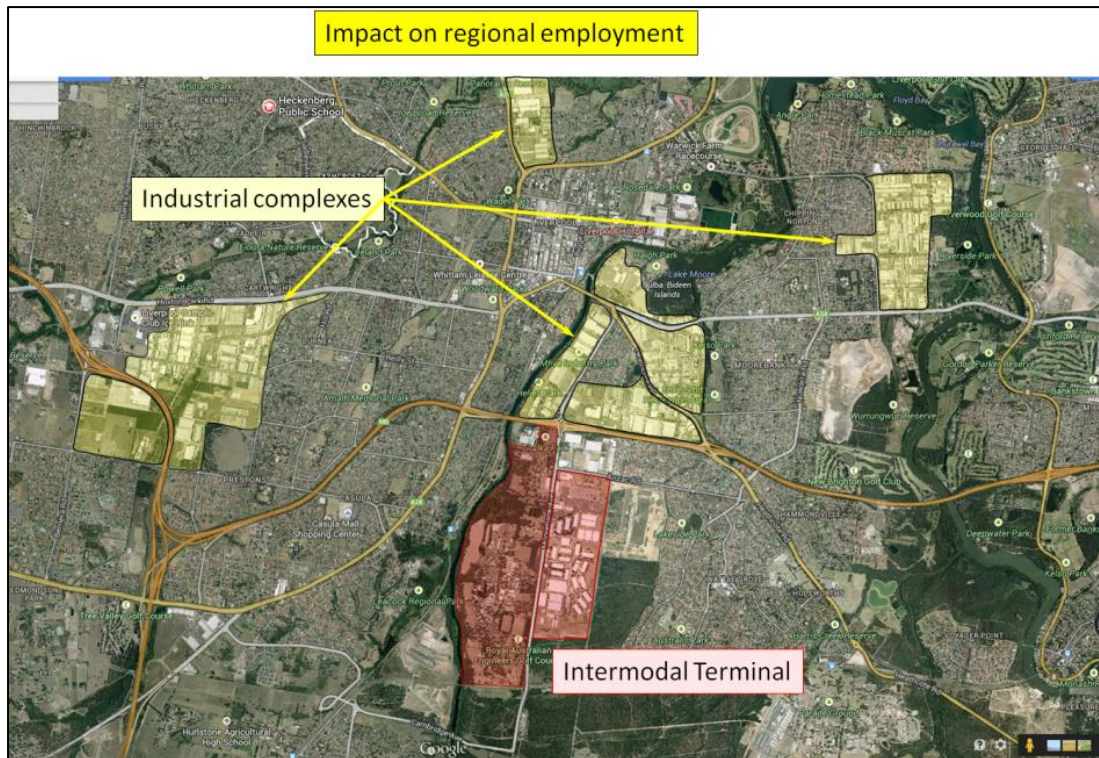
Conclusion: Statement on improved environmental issues is fanciful.

Item 4: An estimated total of 2,625 construction jobs for the port shuttle and interstate terminals and a further 1,700 jobs for the south western Sydney region.

The screenshot shows the Australian Government Department of Finance and Deregulation website. The main content area is titled "Moorebank Intermodal Terminal Project". It includes a sidebar menu on the left with categories like "About the Department", "e-Government & Information Management", "Procurement", "Financial Framework", "Budget", "Central Budget Management System", "Financial Reporting & Accounting Policy", "Superannuation", "Comcover Insurance & Risk Management", "Vehicle Leasing & Fleet Management", "Better Regulation", "Assurance Reviews and Risk Assessments", "Investment Funds", and "Land, Property & Asset Management". The main content area has a search bar at the top right and a "Skip to content" link. The project title is "Moorebank Intermodal Terminal Project". Below the title, it states: "In April 2012 the Australian Government committed to development of the Moorebank Intermodal Terminal (IMT) Project after reviewing the findings of a detailed business case for the facility. You can read the executive summary (1.9 MB)". The project description states: "The project involves the development of freight terminal facilities linked to Port Botany by rail, increasing Sydney's rail freight capacity and reducing road freight on Sydney's congested road network." The detailed business case identified a number of major benefits of the Project including: "3,300 trucks a day taken off Sydney's roads between Port Botany and Moorebank by shifting freight to rail.", "Approximately \$10 billion in economic benefits including reduced freight costs, reduced traffic congestion, reduced traffic accidents and improved productivity.", "Improved environmental outcomes, with less fuel used and less emissions due to reduced road freight – trains generate fewer emissions and use less fuel than trucks for each container moved.", and "An estimated total of 2,625 construction jobs for the port shuttle and interstate terminals and a further 1,700 jobs for the south western Sydney region." The background section states: "The design, construction and operation of the terminal will be undertaken by the private sector through a competitive process, in which they will be provided with an opportunity to contribute to the overall funding of the Project. The Government will establish a Government Business Enterprise to manage the process from 2013." It also mentions: "Funding for the next year of preparatory work for the project will be released in the Federal Budget on 8 May, enabling further development of plans for a port shuttle terminal to open in mid-2017." The project is subject to planning approval with a draft Environmental Impact Statement due to be displayed late in 2012 to enable public feedback. Both Federal and NSW planning approval is being sought.

During the PAC meeting at Wattle Grove, in her 5-minute speech, Sherrie Saxby spoke passionately that the Intermodal would in fact take jobs away from Liverpool, where we seriously need more jobs.

She showed a number of slides, including this one.



Light industrial complexes house 1-2 man businesses. For example, in a block with 10 units, there may be 20 – 25 people working, as motor mechanics, panel beaters, kitchen installers, furniture repair etc.

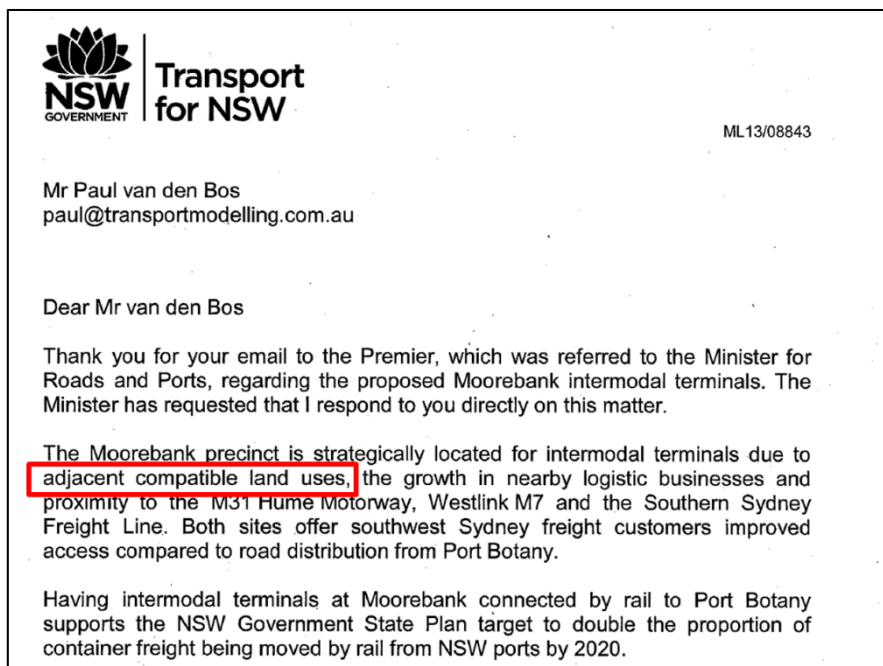
Warehousing needs space. If these units were to be converted into warehousing, the 10-block unit employing 20-25 people would become one warehouse, with at most, two people working there. Most of the work is expected to be done by machines. The result is, that the total employment would be a reduced from the 20-25 people to 1 or 2 people.

The reason for her concern is that on 14th November 2012, Robyn Renwick, First Assistant Secretary, Moorebank Project Office, Department of Finance and Deregulation, in his speech at the Liverpool Chamber of Commerce, stated that some 1250 ha of potential warehousing around Liverpool was available to support the Moorebank Intermodal. He encouraged the Chamber to take up the challenge and support the Intermodal for the good of the local community by developing these lands as warehousing.

Extensive studies have shown that around very large intermodals, there is an overall reduction in employment.

Conclusion: Job creation in the South West is fanciful.

Benefits highlighted by the NSW Government



Refer to the red box on the left.

The nearest houses are a few hundred meters away.

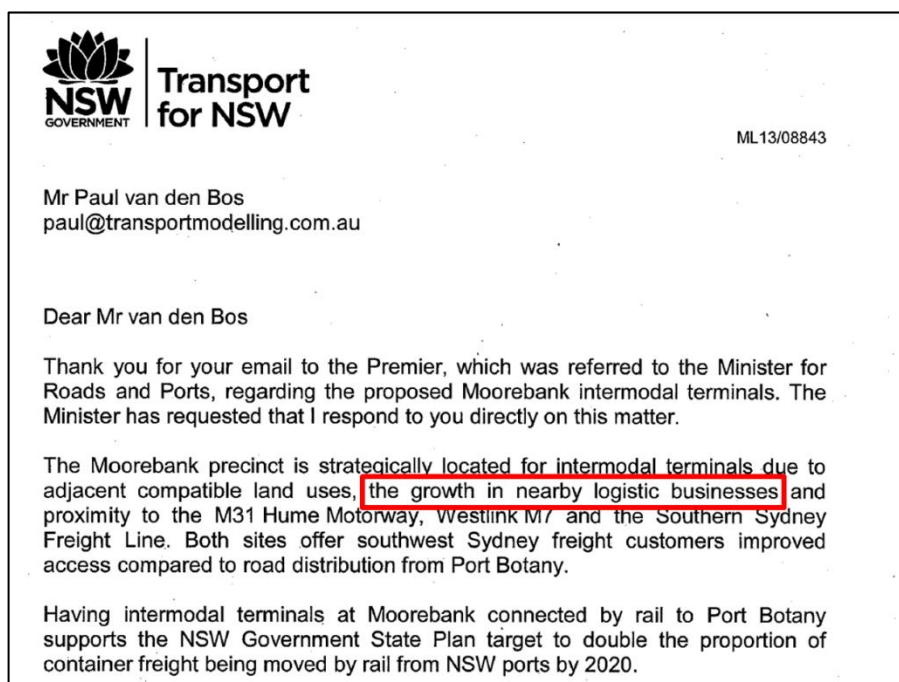
The current affairs program stated that there are 135,000 people living within a 5 km radius of the intermodal.

Google Maps, may be useful here.

<http://aca.ninemsn.com.au/article/8729085/industrial-mega-hub-is-backyard-disaster>

Why build an Intermodal right in the middle where people live?

Conclusion: The statement is fanciful.

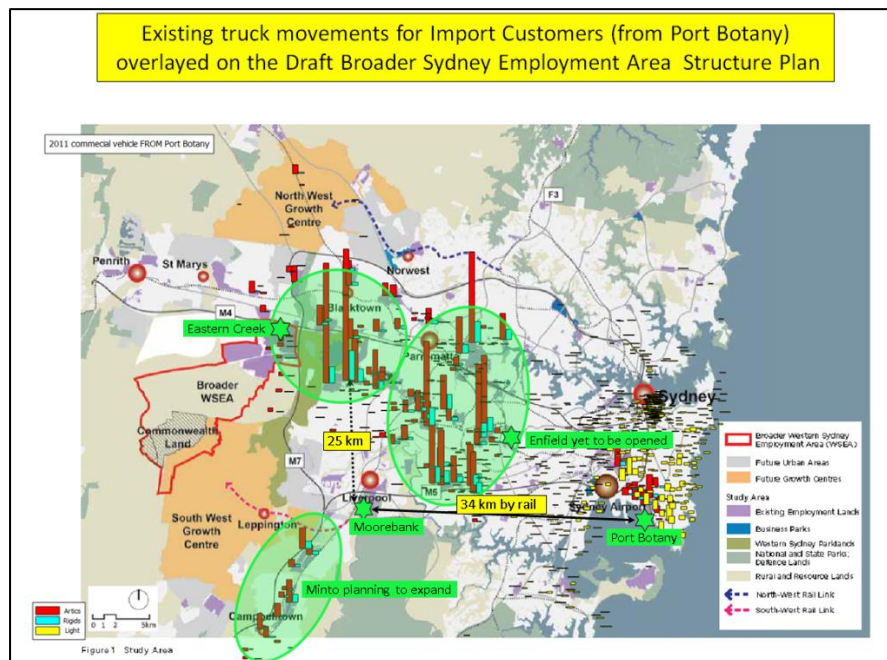


Refer to the red box on the left.

MIC Table 3.6 shown on page 3, illustrates where the future freight market will be.

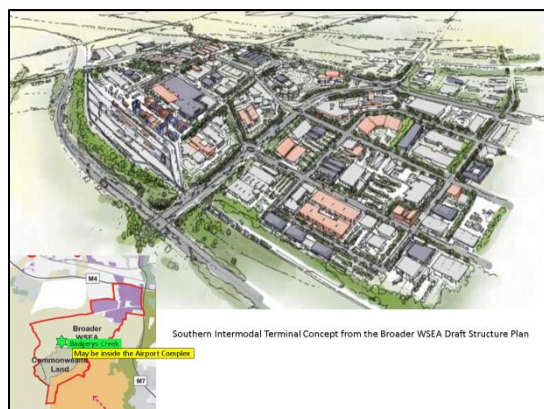
Those markets are shown with the orange dots. The size of the dots represents the number of truck trips.

The figure below shows the current freight market. The destinations are shown as bars. The height bars represents the number of truck trips.



The population surrounding the Broader Western Sydney Employment Area is expected to house about 2.2 million people. That is, a population about twice the size of Brisbane.

The Draft Broader Western Sydney Employment Area Structure Plan, contains an image of the “Southern Intermodal”. The expected TUE requirements are also documented in the Plan.



For some unknown reason, the Southern Intermodal Terminal is not included in the latest NSW Government Freight model.

Why would such an important freight market not be included in the NSW Government Freight model?

Conclusion: Moorebank is nowhere near the existing or future freight markets. The statement is fanciful.



Transport
for NSW

ML13/08843

Mr Paul van den Bos
paul@transportmodelling.com.au

Dear Mr van den Bos

Thank you for your email to the Premier, which was referred to the Minister for Roads and Ports, regarding the proposed Moorebank intermodal terminals. The Minister has requested that I respond to you directly on this matter.

The Moorebank precinct is strategically located for intermodal terminals due to adjacent compatible land uses, the growth in nearby logistic businesses and proximity to the M31 Hume Motorway, Westlink M7 and the Southern Sydney Freight Line. Both sites offer southwest Sydney freight customers improved access compared to road distribution from Port Botany.

Having intermodal terminals at Moorebank connected by rail to Port Botany supports the NSW Government State Plan target to double the proportion of container freight being moved by rail from NSW ports by 2020.

Refer to the red box on the left.

On Google maps, the statement outlined in red on the left appears to be correct. However, there are issues.

Access to the M5 Motorway

SIMTA EIS Report 19

Appendix F2 Transport and Accessibility Impact

Assessment Appendices Part 4.pdf is wholly devoted to this intersection.

The MIC EIS shows that each day, around 35,000 PCUs will hit the Moorebank Av – M5 Motorway intersection. Both proponents have acknowledged that this intersection needs to be upgraded. The cost of the intersection upgrade has not been determined.

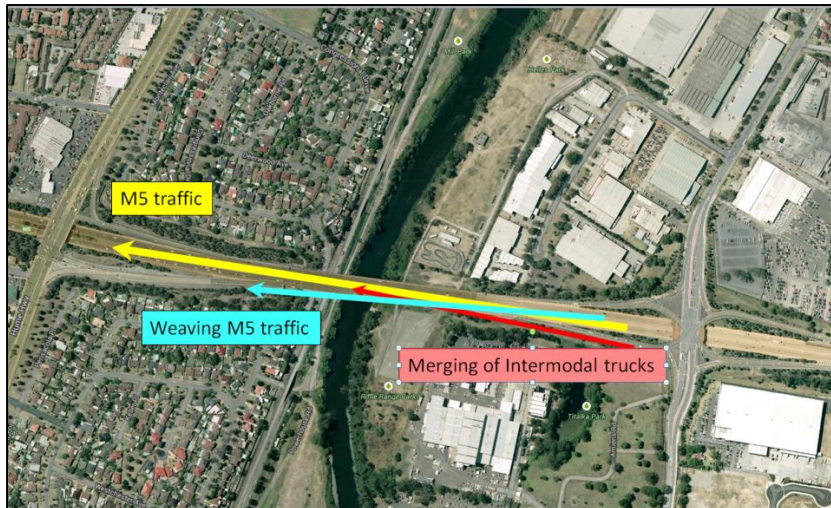
Weaving and Merging on the M5: Once on the M5 Motorway, there is the weaving and merging issue.

MIC has acknowledged in their public consultation meetings, that this issue has not been solved.

SIMTA EIS used a superseded manual for those calculation. In the superseded manual, the calculations were not applicable, and the RTA, now RMS, developed its own formulae. The NSW Government modellers and the Government's Independent Reviewer approved the use of the superseded manual, which was acknowledged as giving poor results.

This and so many other issues have been highlighted to the NSW Government organisations. Was this professional incompetence by these technocrats, or something more sinister?

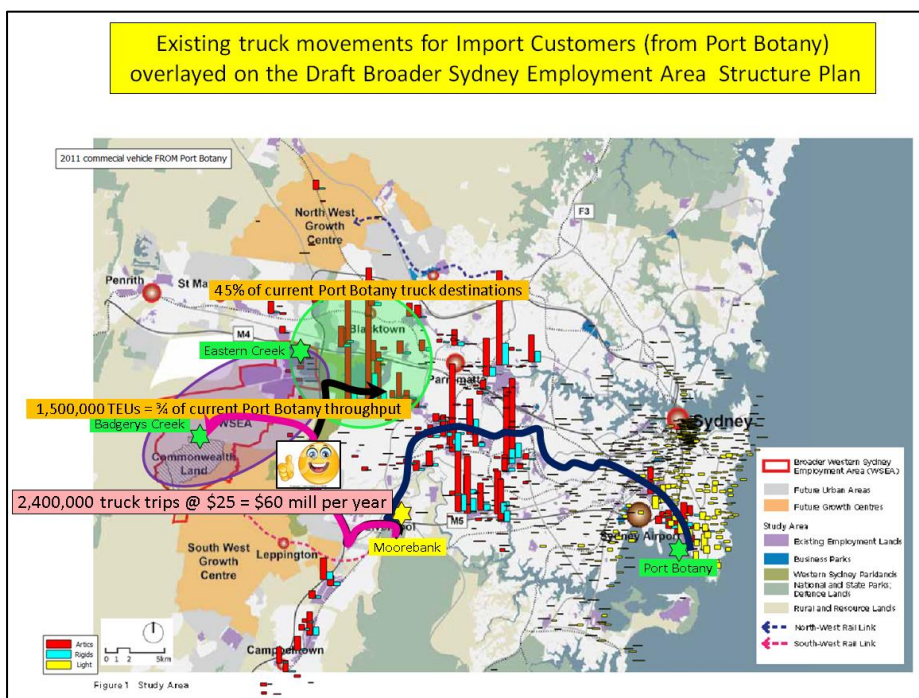
The result is that the SIMTA EIS has been approved by PAC based on poor modelling work.



Once on the Hume Highway, there is the issue of Sydney's worst accident spot. MIC EIS shows that 25% of its truck movements will travel through that section of network. See Item 2 above.

The most important issue is kept to last. M7.

The M7 toll road operators stand to make about \$60 million per year if Moorebank Intermodal Terminal were to be built.



This issue may be the strong incentive for building Moorebank, and the transparent reason for the “gloss” that has been produced for MIC EIS.

Conclusion: M7 toll road owners will benefit by approximately \$60 million per year.

The access to M5 and travel through Sydney's worst accident spot on the Hume Highway have not been addressed.



Transport
for NSW

ML13/08843

Mr Paul van den Bos
paul@transportmodelling.com.au

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Having intermodal terminals at Moorebank connected by rail to Port Botany supports the NSW Government State Plan target to double the proportion of container freight being moved by rail from NSW ports by 2020.

Refer to the red
box on the left.

Some simple calculations:

Enfield Intermodal Terminal, due to open earlier this year, is expected to process 300,000 TEUs – all containers will come by rail.

- This volume, equates to about 15% of Port Botany's current throughput.
- The existing rail share is about 14%. (MICL EIS Page ix)
- Combined, $15\% + 14\% = 29\%$
- This is a little higher than the NSW Government target of 28%. We do not have to wait for 2020 to achieve that target!

Why is the NSW Government not confident in Enfield?

May be the reason is found in The State Infrastructure Strategy 2012 – 2032, page 28.



“Infrastructure NSW recommends that State public funding for additional terminal capacity in Sydney, (including in relation to supporting infrastructure) be minimised until there is greater clarity on whether the short haul rail is viable.”

If the target of 28% is achieved as soon as Enfield is opened, why is the NSW Government emphasising the requirement for Moorebank Intermodal to achieve that target?


Are there other reasons?

Are the 86 reports of the MIC EIS purely “technical” gloss that hides the truth?

May be that is the case.

Quote from Report 046: Technical Paper 1_Traffic transport and access (part A).pdf, Page 62:
“Historical growth of containerised freight handled at Port Botany has been around 7% p.a. over the past five years, and has exceeded earlier forecast.¹⁰ Comparable growth rates are expected to continue into the foreseeable future. Graph 3.1 shows three growth scenarios for containerised freight in NSW¹¹ as projected by the SPC and indicates a “likely” traffic level of 10.9 million TEU p.a. by 2036.”

The reader should compare this forecasted 10.9 million with the 6.5 million used within the NSW Government. Reference: NSW Government, Transport for NSW, Bureau of Transport Statistics, BTS Heavy Vehicle Forecasts, February 2014 Release. The relevant table is shown below.

 BTS Heavy Vehicle Forecasts February 2014 Release				
Table 5.1 Annual Container Forecasts (TEUs)				
	Full Imports	Full Exports	Empty Exports	Total
2011	917,800	357,900	556,000	1,835,600
2016	1,178,600	435,400	743,100	2,357,100
2021	1,521,600	521,800	999,800	3,043,200
2026	1,962,000	633,200	1,328,800	3,923,900
2031	2,530,000	774,200	1,755,700	5,059,800
2036	3,262,500	940,900	2,321,600	6,525,000
2041	4,207,300	1,143,500	3,063,800	8,414,600
2046	5,425,700	1,389,800	4,035,900	10,851,400
Source: FRD				

Are there other reasons for building Moorebank – reasons that are not based on sound economics, engineering or social and environmental considerations?

Let us hope that, that is not the case.

Every intelligent person must now question the rational for building the Moorebank Intermodal:

- None of the initial objects set out for the project will be met - see Items one to four above.
- Every reason put forward by the NSW Government does not stand up if examined in a cursory manner. The Exception is being close to the M7 whereby the toll road operators stand to gain \$60 million per year. At what cost for society should this be done – upgrading the local network with those 34 intersections?
- The NSW target of 28% mode-share will be met as soon as Enfield Intermodal is operational.
- The NSW Government expects that the 10.9 million TEUs in 2036 will be achieved 10 years later than initially thought - in 2046.

MIC modelling shows that every driver in Sydney will be negatively impacted by the traffic generated from the Moorebank intermodal.

Western Sydney is expected to house 2.2 million people. The South West Growth Centre is the size of Canberra, and the North West Growth Centre is about the size of Townsville in Queensland.

The Broader Western Sydney Employment Area is planned to employ the equivalent of the Bangaroo development, 10 times over.

Every planner's dream would be to plan a new city from scratch.

We have time. We do not have to build an intermodal right now. Let common sense prevail, lets us plan properly.