Paul and Narelle van den Bos object to the EIS, on several grounds.

This is a summary of some of the issues. More information is provided below. We are happy to provide more details.

Kind regards
Paul and Narelle van den Bos

Section 1 Growth in container traffic

The Federal and State Governments accept that the future freight growth estimates at Port Botany is 10 times higher than Sydney's demographic related growth.

Given that about 85% of the freight is consumed in the Sydney basin, the Federal and State Governments make the assumption that Sydney's population will be able to afford to spend 10 times more on imported goods than we currently do. For example, the Governments assume that in the future, instead of buying one microwave, we will buy 10 at the same time.

Section 2 Economic viability

About 73% of all the economic benefits from this project are derived from taking 3,300 trucks off the M5 between Port Botany and Moorebank. MICL's modelling shows that only few trucks are taken off the road.

Given that so much of taxpayers' money will be invested in this project, the whole economic viability needs to be reassessed.

Section 3 Freight markets

In Lucy Turnbull's Three Cities Plan, Moorebank Intermodal has to compete with the established freight market of "Middle City", where the Enfield and the upgraded Chullora Intermodals currently operate.

Moorebank is too far from "Western City". From a traffic point of view, it is choked by the M5 Bridge over the Georges River.

Section 4 Relocating Port Botany's truck movements to Sydney worst traffic congested area

Relocating approximately half of the Port Botany's freight movements to Moorebank, will relieve some of Port Botany's freight related movements, but those freight movements will be added to Moorebank, which has Sydney's worst traffic conditions.

Section 5 Employment numbers

Could 7,000 people be employed in the truck village?
Is the Moorebank Intermodal a façade for Australia's biggest brothel?

Section 6: future traffic growth that is less than half the historic growth

The process involves 2010 data for the M5, and 2015 figures for the other sites, to obtain an "average" growth. This way, the 4.3% historic growth on the M5 could be deduced to 1.3%.

SIMTA's earlier EIS stated that this approach was approved by the NSW Government.

- Why was it necessary to apply an average to the growth? Most modellers would apply the historical growth normally.
- Why did SIMTA continue to use the 6-year old M5 figure?
    - Since that survey, there has been a 6-year growth in background traffic, and
    - The widening of the M5 has been completed.

- Every traffic engineer expects that the traffic flow will have increased over those 6 years and the widening will have added even more traffic.

This approach raises serious professional and ethical modelling practices in NSW

Section 7 EIS "not false or misleading"

Westley Owers signed off on the EIS, claiming that it is not false or misleading.

The following examples show that the EIS is extremely misleading.

- Example 1: False and misleading information – trucks to nowhere
  - The report: 2016-10-25 Appendix M_Construction Traffic Impact Assessment_October 2016, details the construction traffic between the site and Moorebank Avenue.

  There is no discussion about how the traffic moves from their origins or destination to Moorebank Avenue.

- Example 2: False and misleading information – five years after highlighting that the M5 Bridge over the Georges River is "an existing issue" in their first EIS, there are no references to it in this EIS
  - SIMTA's first EIS identified that the M5 Bridge over the Georges River as a traffic issue
  - SIMTA's own traffic auditors stated that SIMTA ignored future traffic growth
  - Simple theoretical traffic engineering principles work against this proposal

  The five-year old M5 Bridge traffic issue is still not addressed in the EIS

- Example 3: False and misleading information – misleading traffic growth numbers
  - EIS describes additional traffic as a percentage to one decimal place accuracy
    - giving the (false) impression that
      - results are extremely accurate, and
      - the percentage of additional flows are very small.
  - The relationship between traffic flow and traffic delay at intersections is highly non-linear.
    - SIMTA's first EIS, for the Newbridge Rd / Nuwarra Rd intersection, which only a few trucks will use, will increase the intersection delay from 357 seconds (almost 6 minutes) to 404 seconds (over 6 ¾ minutes).

      Given that the Federal and NSW Government have proclaimed that Moorebank is ideally situated, this delay may surprise the reader. In MICL's EIS, a delay of 845.2 seconds (14 minutes and 5 seconds) can be found for one right hand turning movement.
  - Extensive queues
    - Using figures extracted from MICL's EIS, without the Intermodal, about 75% of the path from the Intermodal to Orange Grove Rd, will be occupied by queues.

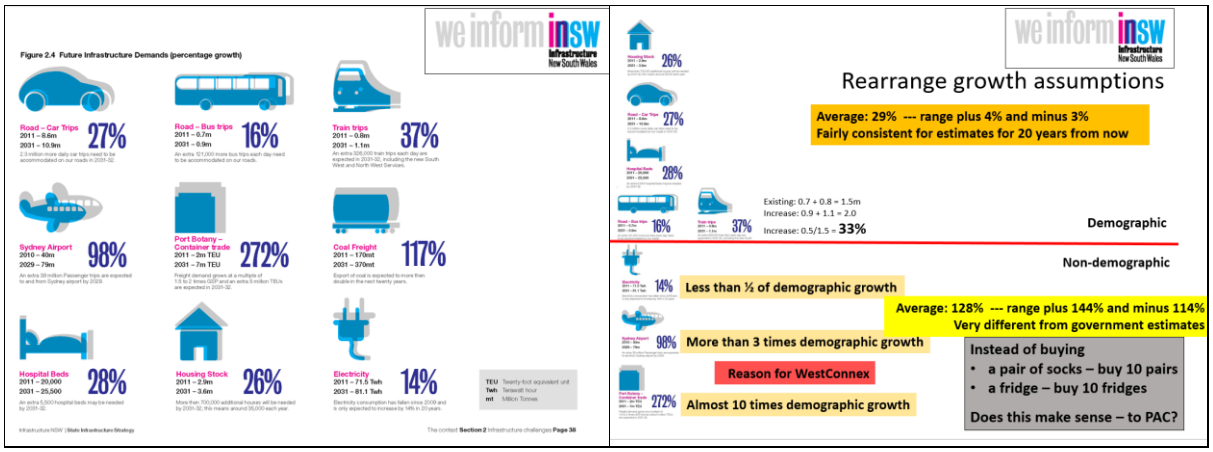
  Providing the additional traffic growth only as a percentage, accurate to one decimal place, is misleading. The impacts of delays and queues should also have been included.

  Example 4: false and misleading information – vehicle crash figures
  - The EIS reports the total crashes as 444, which is about 65% of the figures found in SIMTA's earlier EIS documents.

- A comparison between the two earlier EIS documents showed an increase of 20% in injuries and heavy vehicle crashes
- MICL's EIS states that the M5 Motorway is a black spot, with a rate of accidents that is about 40 times higher than the RMS guidelines. (figures are three years old, and were taken the before the M5 Widening was completed).
- SIMTA's EIS states that about 75% of all their Intermodal vehicles will use this black spot
- SIMTA's earlier EIS stated that about 27% of their Intermodal Traffic will use Sydney's worst accident hot spot.

Given this background, it is misleading to only report crashes for a reduced study area.

Section 1 Growth in container traffic

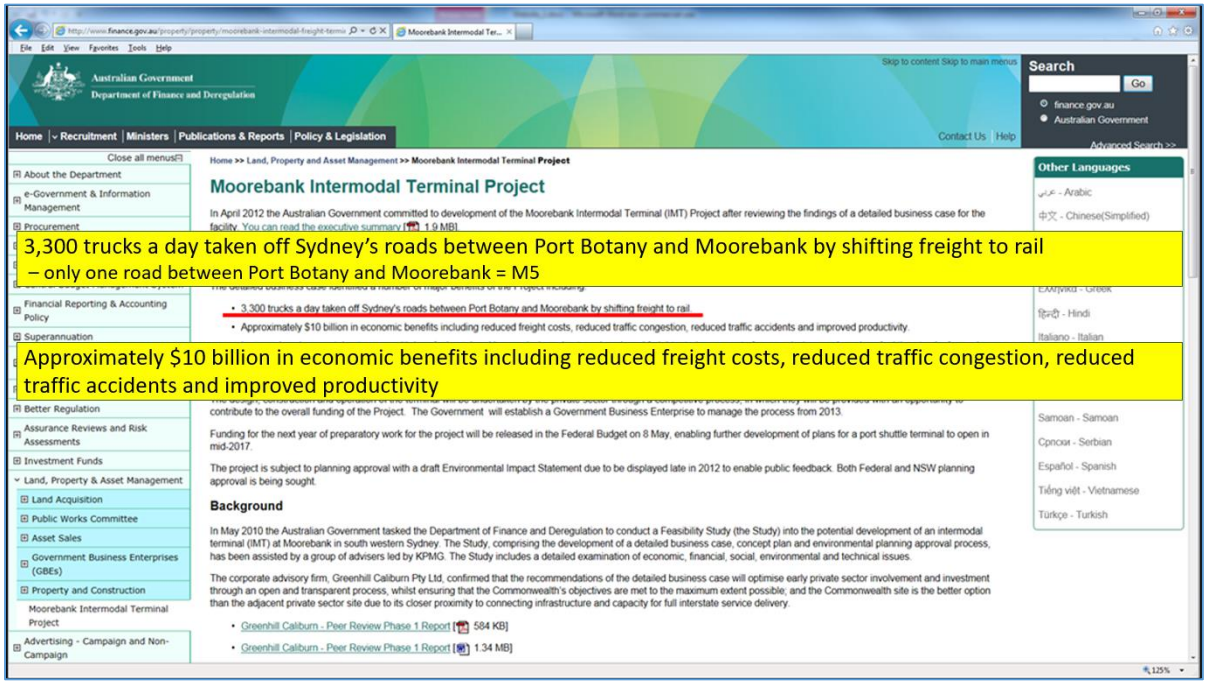


Reference: First things first, The State Infrastructure Strategy 2012 – 2032, We inform in NSW, Infrastructure NSW, page 38

Average demographic related growth = 29%
Container growth = almost 10 times higher than demographic average

About 85% of the freight is consumed in Sydney basin.
Therefore, Sydney's freight consumption must increase 10-fold.

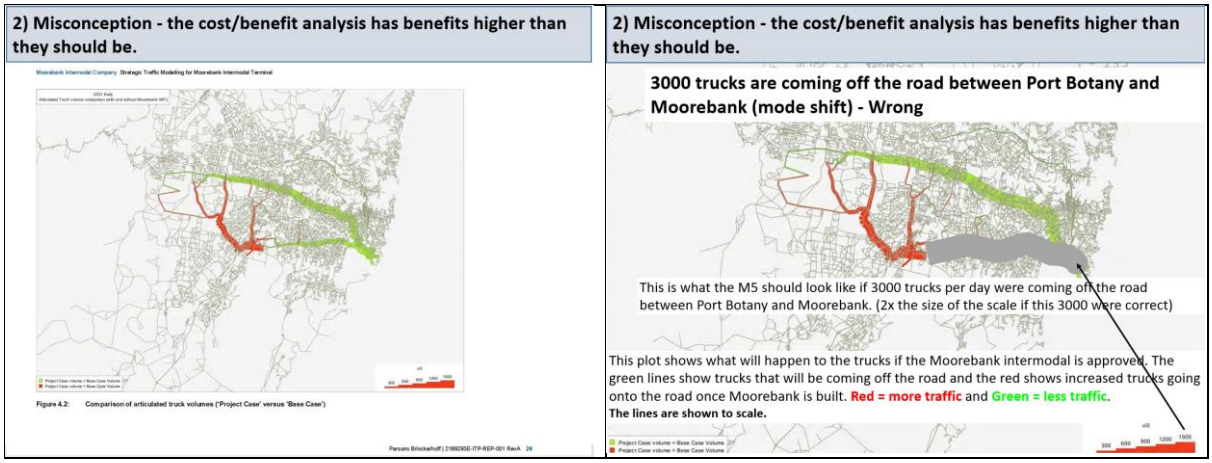
Section 2 Economic viability



In the figures below, from MICL's EIS, the **Green lines represent the reduction in traffic** and the **Red lines represent an increase in traffic**.

The thickness of the lines represents the traffic volumes.

The expected reduction of 3,000 trucks has been drawn on the map on the right-hand side.



Section 3 Freight markets

The Moorebank Intermodal Terminal site is on the border of "Western City" and "Central City", in Lucy Turnbull's Three Cities Plan.

Both the "Eastern City" and "Central City" are well established with some in-fill in the future.
Both are currently already serviced by freight. The new Enfield intermodal and upgraded Chullora Intermodal will consolidate that market.

The new growth is clearly in the "Western City".
This is where the future freight will be required.

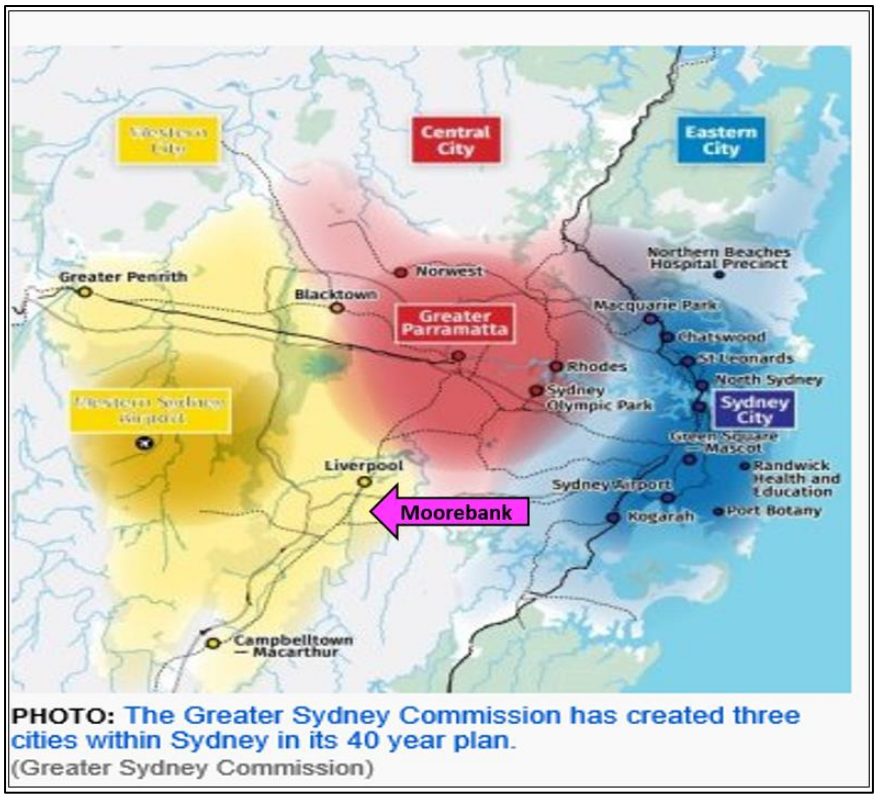
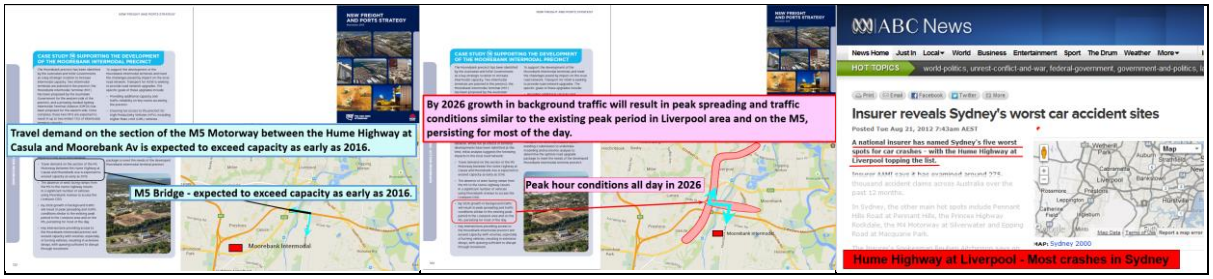


PHOTO: The Greater Sydney Commission has created three cities within Sydney in its 40 year plan.
(Greater Sydney Commission)

Moorebank Intermodal Terminal is too far removed from the Western market.
Eastern Creek and Badgerys Creek (Southern Intermodal) are geographically closer to the freight hub. Moorebank's traffic choke point is the M5 Bridge over the Georges River. This is discussed below.

Section 4 Relocating Port Botany's truck movements to Sydney worst traffic congested area

Relocating approximately half of the Port Botany's freight movements to Moorebank, will relieve some of Port Botany's freight related movements, but those freight movements will be added to Moorebank, which has Sydney's worst traffic conditions.



References:

- NSW Freight and Ports Strategy, November 2013, page 122
- ABC news

These images have been used in over 35 presentations including several times to NSW Government staff, MICL and PAC to point out the appalling traffic conditions already existing at Moorebank, and the future grid locked traffic conditions.

Section 5 Employment numbers

Serious questions have to be asked about the employment numbers that the Moorebank Intermodal Terminal will generate.

The publicity associated with the Moorebank Intermodal, is that it will provide employment for 7,000 people.

Such a high employment number raise serious questions:

- In the world's most advanced, and most automated intermodal, the actual numbers on site will be few: the guard dogs and their handlers and a few contractors undertaking maintenance.
- Most of the people will be employed in the Truck-village.

For most of 7,000 people employed in the truck-village, it begs the serious question, what work they will be doing there?

- **Is the Moorebank Intermodal Terminal only a facade for Australia's biggest brothel?**
- **If that is the case, is that really at the top of the NSW Government's priority list?**

Section 6: Why does the NSW Government agree with SIMTA to use future traffic growth that is less than half the historic growth?

Table 2-3 clearly shows that the M5 Motorway traffic growth is about 4.3% per annum between 2002 – 2010. The agreed average growth figure is 1.3%

Table 2-3 Historical Traffic Growth between 2002 and 2015

Roads/Locations	Annual Average Growth Rate (%)		
	Between 2002-2009	Between 2002-2010	Between 2010-2015
M5 Motorway, at bridge over Georges River		▲4.3%	
Moorebank Avenue, north of Cambridge Avenue	▼0.3%		▲0.3%
Moorebank Avenue, south of Anzac Road			▼0.3%
Anzac Road, east of Moorebank Avenue			▲1.8%
Average for all roads (last 13 years)	▲1.3%		

The historical traffic data indicates the following plausible trends:

- Consistent traffic growth was observed on the M5 Motorway of about 4.3% per annum (2002 – 2010).
- The data suggest that the historical traffic volumes on Moorebank Avenue (between the M5 Motorway and Cambridge Avenue) has been relatively stable which fluctuations of 0.3%. This could be attributed to numerous factors including increases in traffic due new residential developments in Glenfield and Macquarie Fields, reductions in traffic due the relocation of the DSNDC and the M5 West Widening (less 'rat-running" of traffic on Moorebank Avenue due to increased motorway capacity).
- The last five years of data (between 2010 and 2015) suggests traffic increases on the Anzac Road of about 1.8% per annum which may have been attributed to the development of the nearby industrial estates at Yulong Close, however this the specific result of this is unclear at this time.

On average, the last 13 years of data suggests traffic growth of approximately 1.3% per annum to 2015. This growth rate appears to be consistent with regional growth rate between 1% and 2% per annum observed on the adjacent State Road network.

43

In the earlier EIS SIMTA stated that the NSW Government agreed with SIMTA to use the 1.3% growth for the future scenarios.

This agreement raises very serious professional, ethical and moral issues:
Why was this low growth agreed to for the traffic over the M5 Bridge?

- **Five years ago, SIMTA's own internal traffic auditors referred to the "existing capacity constraints under current road conditions".**
- **Why has there been no traffic counts on the M5 Bridge since the 2010 count?**
  - **The RMS web site has a 2012 count.**
  - **The other links in the table have 2015 counts.**

It is noted that since the 2010 count, that is 6 years old, the M5 Motorway has been widened to a 3-lane each way. The reason for the widening was to give it greater capacity and more vehicles could use the M5 Motorway.

Is Westley Owers aware that by not using the latest available data, that it is professionally an unsound approach? Misleading?

Section 7 EIS not false or misleading

We take issue when Westley Owers signs off with the words: “the information contained within this EIS is not false or misleading”.

Environmental Impact Statement:	An EIS is attached which addresses all matters in accordance with Part 4 (Division 4.1) of the *Environmental Planning and Assessment Act* 1979 and Schedule 2, Part 3, clause 7(1)(e) of the *Environmental Planning and Assessment Regulation 2000*. I certify that I have prepared the contents of this EIS in accordance with the Secretary's Environmental Assessment Requirements (SEARs) (Ref SSD 14-6766) dated December 2014, and that to the best of my knowledge, the information contained within this EIS is not false or misleading.
Signature:	
Name:	Westley Owers
Date:	21/10/2016

Here are some examples of blatant misleading information.

Example 1: False and misleading information – trucks to nowhere

The report: 2016-10-25 Appendix M_Construction Traffic Impact Assessment_October 2016, details the construction traffic between the site and Moorebank Avenue.

There is no discussion about how the traffic moves from their origins or destination to Moorebank Avenue. How is that possible?

In our response to SIMTA’s earlier EIS, we made the recommendation that a second opinion from the Institution of Engineers be sought about the professional quality of that traffic report.

Does Westley Owers really think that such a report was not misleading?

Example 2: False and misleading information – five years after highlighting that the M5 Bridge over the Georges River is an existing issue, there are no references to it

“The M5 Motorway provides the **main road link** between the Proposal site and the key employment and industrial areas within the West and South Western Sydney Sub-Regions.” Moorebank Precinct West - Stage 2 Proposal Environmental Impact Statement – (SSD16-7709), Part 4, Division 4.1, State Significant Development, October 2016, page xxvii

If the M5 is indeed the main link, then why haven’t we seen studies to make sure it can carry the extra freight traffic.

Consider SIMTA’s EIS five years earlier, “any further increase on demand from both future background and SIMTA traffic at these intersections should be investigated thoroughly”. See image below.

SIMTA States More Studies Necessary

any further increase on demand from both future background and SIMTA traffic at these intersections should be investigated thoroughly

3.3.3 Existing Network Operational Issues

Further network operational analysis indicated ten intersection-related issues within the "core" area. While some of these issues do not necessarily reflect an overcapacity situation for the entire intersection, any further increase on demand from both future background and SIMTA traffic at these intersections should be investigated thoroughly. The identified intersection operational issues are summarised in Figure 3-7.

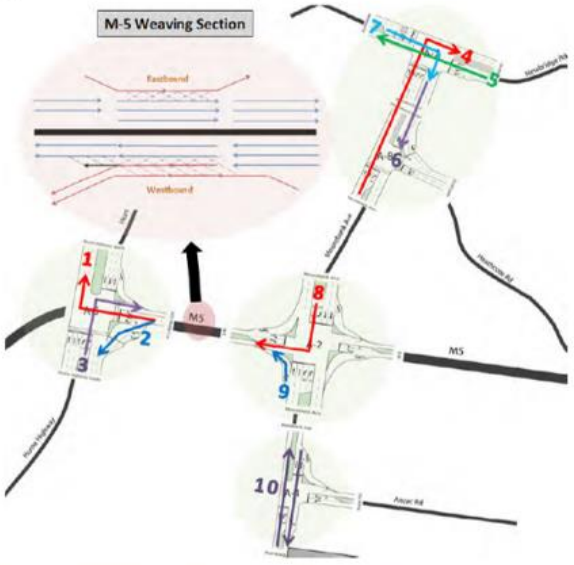


Figure 3-7 Existing Network Operational Issues Identified in Core Area

Moorebank Intermodal Terminal Facility (MITF)—Traffic and Transport, page 50

Note that in SIMTA's five year earlier EIS, the problematic issues of the weaving and merging on the M5 Bridge over the Georges River was specifically highlighted.

The results from SIMTA's modelling work for that EIS was questioned by many professional people, including SIMTA's own traffic modelling auditors: "There is no mentioning of background traffic growth. It is unclear whether this is due to existing capacity constraints under current road conditions?" SIMTA Moorebank Intermodal Proposal, Paramics (Traffic) Model Audit, Halcrow, Prepared for Sydney Intermodal Terminal Alliance (SIMTA, 29 July 2011.

More than five years ago, SIMTA's own modelling auditors questioned why SIMTA modellers did not incorporate the future background traffic in their modelling work.

Now, that more than five years have passed, the reader still cannot find any solution to this issue in the current EIS documents.

There may be an explanation for SIMTA to ignore this issue. It is based on elementary traffic engineering theory:

- SIMTA's first EIS five years ago, surveyed the traffic speed on the M5 Bridge over the Georges River. It found that the speed was between 50 km/hr and 60 km/hr.
    - At 50 km/hr, the average spacing between vehicles is about 23 metres
    - At 60 km/hr, the average spacing between vehicles is about 26 metres
- The length of a A-Double is about 32 meters and for a B-Double about 23 meters
- In the last five years, there has been a natural growth in traffic. In addition, there was the widening of the M5.

Every traffic engineer expects that there has been a growth in background traffic over the last 5 years and the widening of the M5 will have resulted in additional traffic on the M5 Motorway.

The impact of the additional traffic can be measured in three ways: (1) reduced speed, (2) reduced spacing between the vehicles, and (3) increased crashes.

There is now more traffic is being squeezed onto the M5 Bridge than was the case five years ago. Therefore, the spacing between the vehicles will be smaller, and thus making it even more difficult for traffic to merge and weave into the M5 Motorway.

Five years ago, the SIMTA modellers could not model the Intermodal traffic merging and weaving onto the M5 Motorway. In fact, their 2010 PM model showed that 757 vehicles could not even enter the network, because of the congestion in 2010.

Now, they are trying to model it again, with even more traffic on the M5 Motorway, but the traffic engineering theory is working against them.

Why does Westley Owers not refer to all these issues dealing with the MAIN ROAD LINK?

Given that five years ago, this traffic issue has been highlighted by SIMTA themselves, where are the results from the report that states that this has now been "investigated thoroughly"?

How can Westley Owers claim that this EIS is not false or misleading?

Example 3: False and misleading information – misleading traffic growth numbers

In the current EIS, the Moorebank Intermodal Terminal traffic flows have been described to one decimal place accuracy – giving the (false) impression that (a) results are extremely accurate, and (b) the percentage of additional flows are very small.

Sadly, for Westley Owers, the small percentage of additional flows makes a huge difference to the intersection delays as shown in the graph below.

Background

In the plot below:

- *on the left-hand-side, vehicles will experience low delays when there are few vehicles – illustrated with an image of two cars at an intersection - in a blue border, and*
- *on the right-hand-side, vehicles will experience long delays when there are many cars – illustrated with an image of many cars at an intersection and a purple border.*

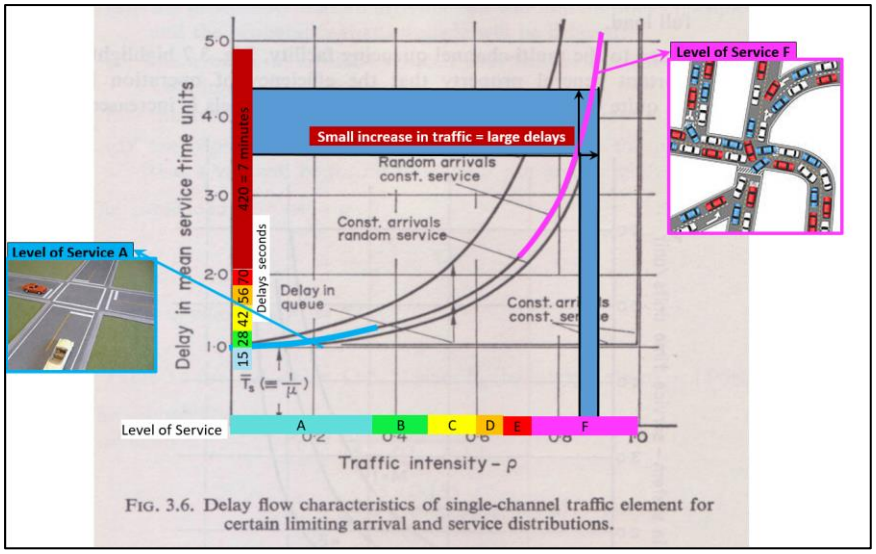


FIG. 3.6. Delay flow characteristics of single-channel traffic element for certain limiting arrival and service distributions.

When traffic flows are high, a small increase in additional traffic will result in large increase in delays at intersection. For traffic engineers this non-linear traffic flow – delay relationship is a fact.

It is a gross assumption to expect that the general population would also be aware of this non-linear relationship.

Without this knowledge, readers could falsely assume that the low additional traffic flows from the intermodal will result in only small increases in intersection delays.

Our book: Moorebank Intermodal, Better Options, details 34 network improvements that fall in the category Level of Service F. SIMTA's earlier EIS documents contributed 11 intersections to that list. Link to our book:
www.transportmodelling.com.au/Intermodal/MoorebankIntermodal_BetterOptions.pdf

Intersection queue length

The table below has been extracted from the MICL EIS, and shows intersection queue lengths for a trip from the Moorebank Intermodal to Hume Highway - Orange Grove Rd intersection in the AM peak in 2030. These queue lengths are the expected lengths **without** the Moorebank Intermodal.

AM PEAK **2030 Future traffic without Moorebank IMT development (Do-nothing scenario)**	**Delay Left turn meters**	**Delay Through turn meters**	**Delay Right turn meters**
Site: I-03 2030 DN BASE AM Intersection of Moorebank Avenue and Defence Support Access (Military Access 1) Signals - Fixed Time Cycle Time = 90 seconds (Optimum Cycle Time - Minimum Delay)		971.6	
Site: I-02 2030 DN BASE AM Intersection of Moorebank Avenue and Anzac Road Signals - Fixed Time Cycle Time = 103 seconds (User-Given Phase Times)		752.0	
Site: I-01 2030 DN BASE AM Intersection of Moorebank Avenue, Anzac Road and Bapaume Road - Giveway / Yield (Two-Way)		0.0	
Site: I-13 2030 BASE AM	25.1		

Moorebank Avenue / the M5 Motorway 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 74 seconds (User-Given Phase Times)			
Merging on the M5 Bridge – no data			
Site: I-14 2030 BASE AM M5 Motorway / Hume Highway 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 159 seconds (User-Given Phase Times)			469.4
Site: I-05 2030 BASE AM Hume Highway / Reilly Street 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times		64.3	
Rose St – no data			
Site: I-04 2030 BASE AM Hume Highway / Hoxton Park Road / Macquarie Street 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)		52.5	
Site: I-03 2030 BASE AM Hume Highway / Memorial Avenue 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)		504.3	
Moore St – no data			
Site: I-02 2030 BASE AM Hume Highway / Elizabeth Drive 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)		474.4	
Campbell St – no data			
Site: I-01 2030 BASE AM Hume Highway / Orange Grove Road 2030 BASE AM PEAK 7:45 am - 8:45 am Signals - Fixed Time Cycle Time = 150 seconds (User-Given Phase Times)	288.4		
Total	3,601.9		

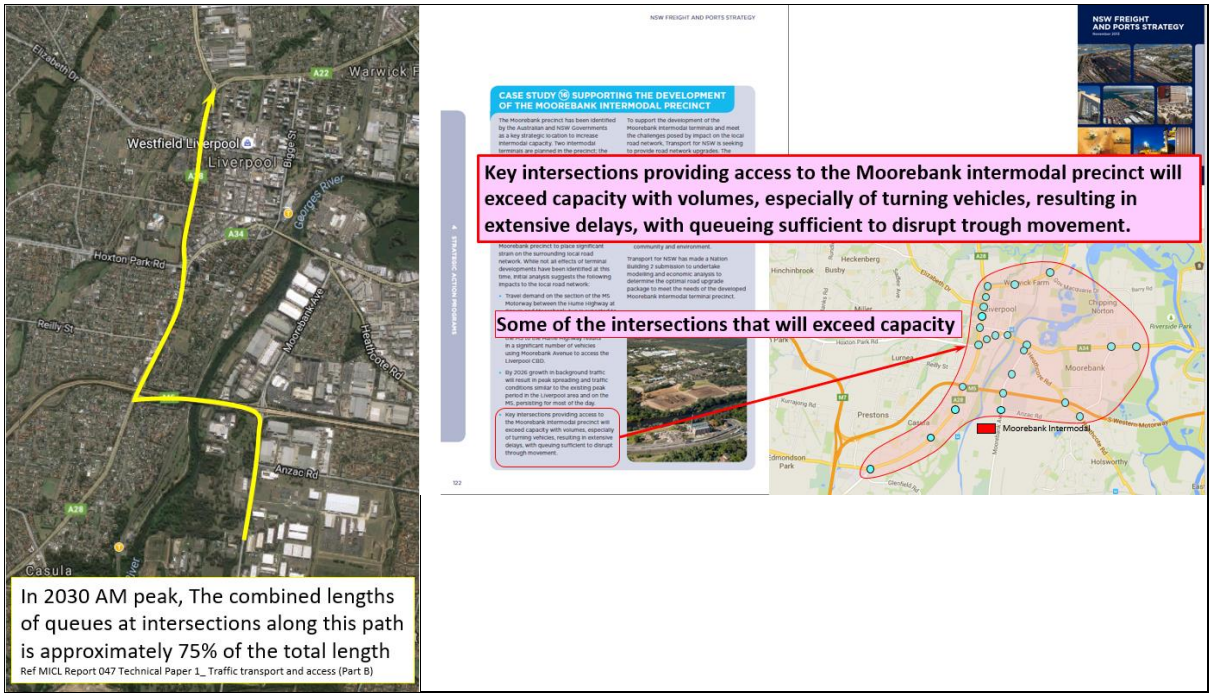
Ref: 047 Technical Paper 1_ Traffic transport and access (Part B), Appendix F, 2023 SIDRA results with and without Moorebank IMT, Appendix H, 2030 SIDRA results with and without Moorebank IMT

Queue length

According to Google Maps, this distance is about 5.6 km.

With no data on 4 intersections, and no estimate of the queue length for the M5 Bridge on-ramp merge, the total modelled length of the queue is 3.6 km.

Using the most optimistic estimates for the missing data, the queue length would cover about 75% of the whole path (if vehicles can enter the M5 Bridge – this estimate does not include the queue length from that movement).



Westley Owers' EIS only refers to the small additional traffic flows in percentages, accurate to one decimal place.

He totally ignores to mention:

- **the resulting massive increase in traffic delays, and**
- **that queues are expected to cover most of the road links.**

How can Westley Owers claim that this EIS is not false or misleading?

Example 4: false and misleading information – vehicle crash figures

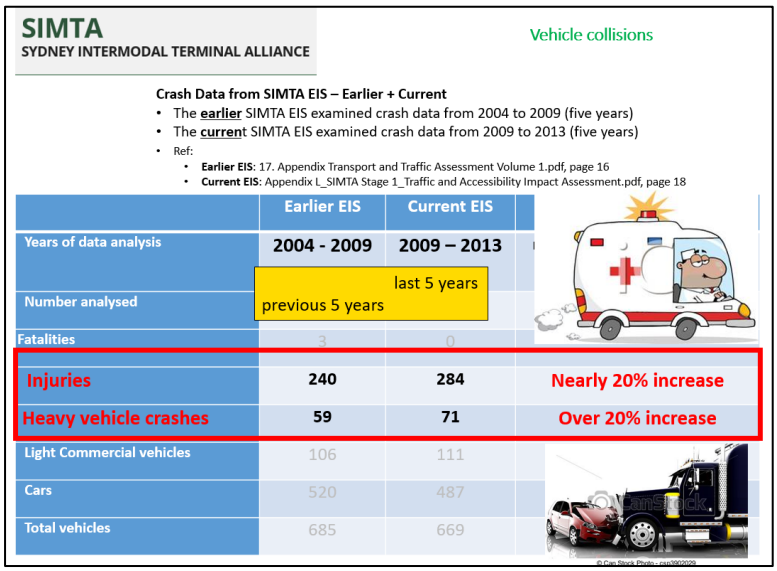
The table below shows the summary of the crashes. Reference Moorebank Precinct West (MPW) – Stage 2 Proposal, Operational Traffic and Transport Impact Assessment, Part 4, Division 4.1, State Significant Development, October 2016, page 44.

Table 2-4 Crashes by Type

Crash Type	Crashes	%
Rear-end	203	45.7%
Intersection, adjacent approaches	55	12.4%
Lane change	38	8.6%
Opposing vehicles; turning	33	7.4%
Off road on straight, hit object	32	7.2%
Parallel lanes, turning	15	3.4%
Head-on (not over-taking)	12	2.7%
Other crash type	56	12.6%
Total crash	444	100%

Source: RMS Crash Data 2010-2015

This table must be compared to the crash data that is found in SIMTA's earlier EIS documents, which are summarised in table below:



SIMTA
SYDNEY INTERMODAL TERMINAL ALLIANCE

Vehicle collisions

Crash Data from SIMTA EIS – Earlier + Current

- The **earlier** SIMTA EIS examined crash data from 2004 to 2009 (five years)
- The **current** SIMTA EIS examined crash data from 2009 to 2013 (five years)
- Ref:
  - **Earlier EIS:** 17. Appendix Transport and Traffic Assessment Volume 1.pdf, page 16
  - **Current EIS:** Appendix L_SIMTA Stage 1_Traffic and Accessibility Impact Assessment.pdf, page 18

	Earlier EIS	Current EIS	
Years of data analysis	2004 - 2009	2009 – 2013	
Number analysed	previous 5 years	last 5 years	
Fatalities	3	0	
Injuries	240	284	Nearly 20% increase
Heavy vehicle crashes	59	71	Over 20% increase
Light Commercial vehicles	106	111	
Cars	520	487	
Total vehicles	685	669	

The table shows that between the two earlier EIS documents, the injuries and heavy vehicle crashes increased by 20%.

Misleading information

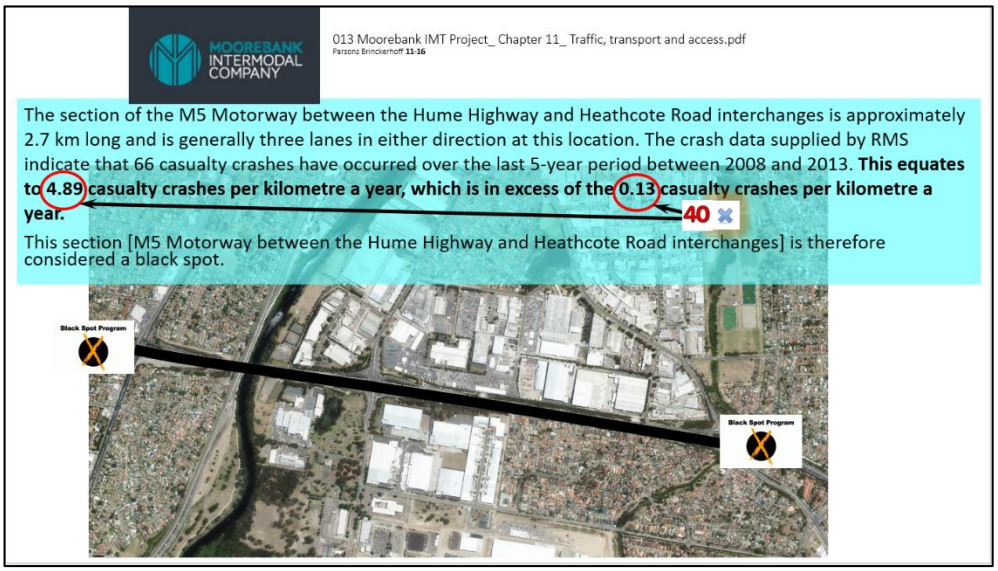
Why change the accident study area?

- In the first two EIS documents the crashes were 685 and 669.
- In the new study area, the crashes were 444, about 65% of the earlier EIS documents

Background:

MICL's EIS states that the M5 Motorway is a black spot, with a rate of accidents that is about 40 times higher than the RMS guidelines. See reference in image below.

Note that these reported figures are some three years old, and were taken the before the M5 Widening was completed.



MOOREBANK INTERMODAL COMPANY

013 Moorebank IMT Project_ Chapter 11_ Traffic, transport and access.pdf
Parsons Brinckerhoff 11-16

The section of the M5 Motorway between the Hume Highway and Heathcote Road interchanges is approximately 2.7 km long and is generally three lanes in either direction at this location. The crash data supplied by RMS indicate that 66 casualty crashes have occurred over the last 5-year period between 2008 and 2013. **This equates to 4.89 casualty crashes per kilometre a year, which is in excess of the 0.13 casualty crashes per kilometre a year.** 40

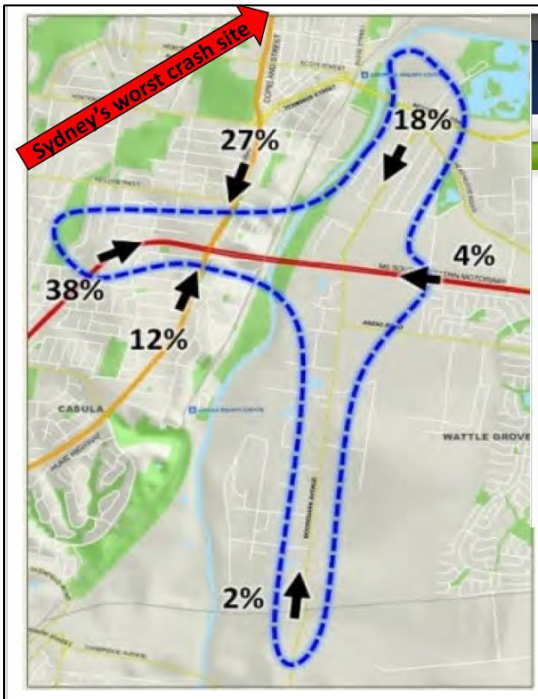
This section [M5 Motorway between the Hume Highway and Heathcote Road interchanges] is therefore considered a black spot.

Black Spot Program

Black Spot Program

SIMTA's EIS states that about 75% of all their Intermodal vehicles will use this black spot.

In addition, SIMTA's earlier EIS stated that about 27% of their Intermodal Traffic will use Sydney's worst accident hot spot.



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Insurer reveals Sydney's worst car accident sites

Posted Tue Aug 21, 2012 7:43am AEST

A national insurer has named Sydney's five worst spots for car crashes - with the Hume Highway at Liverpool topping the list.

Insurer AAMI says it has examined around 275-thousand accident claims across Australia over the past 12 months.

In Sydney, the other main hot spots include Pennant Hills Road at Pennant Hills, the Princes Highway Rockdale, the M4 Motorway at Silverwater and Epping Road at Macquarie Park.

The Insurer's Spokesman Reuben Aitchinson says on average there were roughly two crashes every day at each of the five worst spots.

MAP: Sydney 2000

Figure 7-6 Inbound Truck (Rigid and Articulated) Distribution to Site during AM Peak

If Westley Owers was serious about the "not false or misleading information", then

- **the same study area should have been used**
- **put the crashes in context of the "black spot" that has an accident rate that is 40 times higher than the RMS guidelines, and**
- **that 27% of the SIMTA traffic will go through Sydney's worst accident hot spot.**