



\$



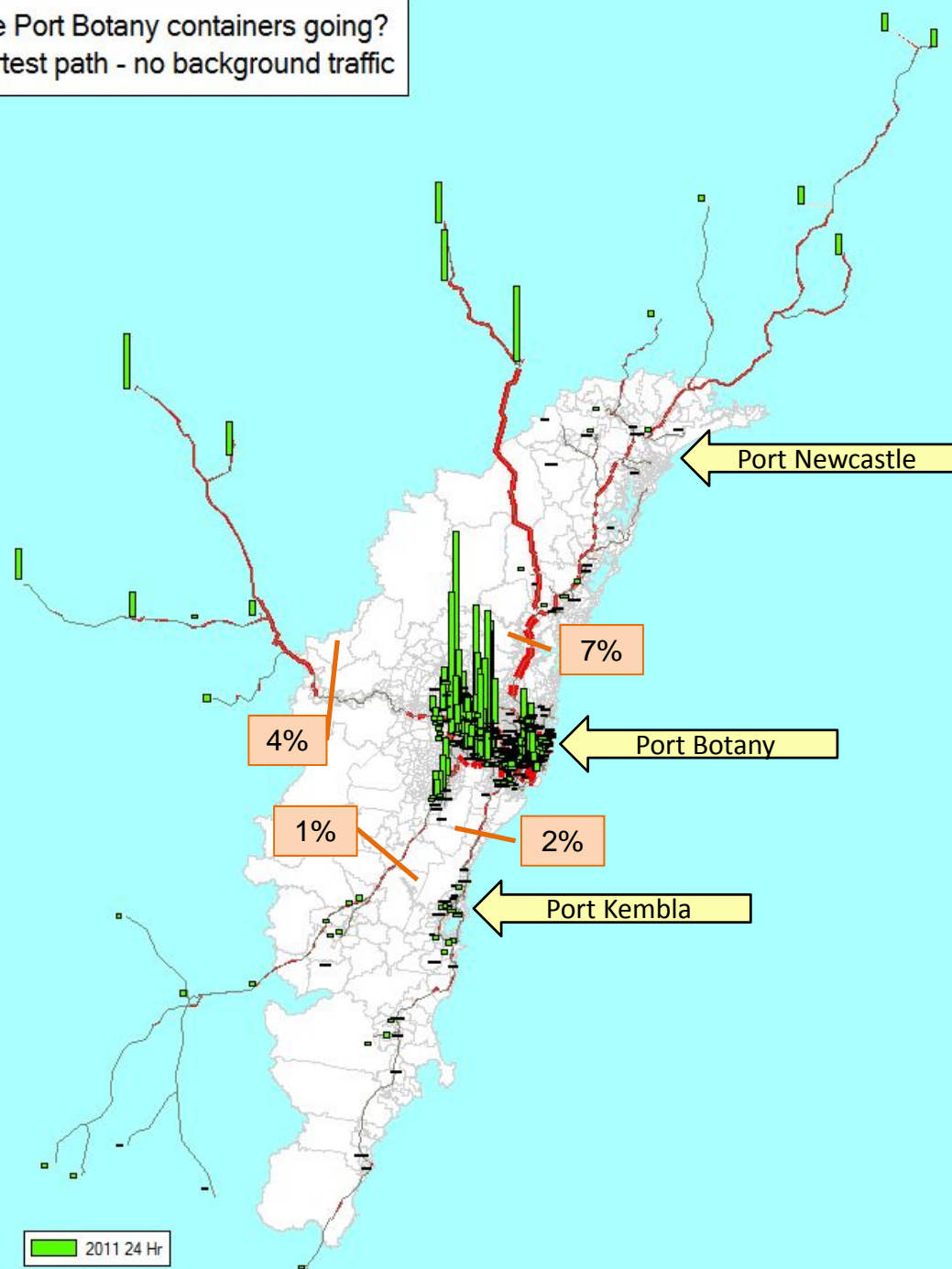
# **Moorebank Intermodal Unforgivable Cost for the Tax Payer & Liverpool Community**

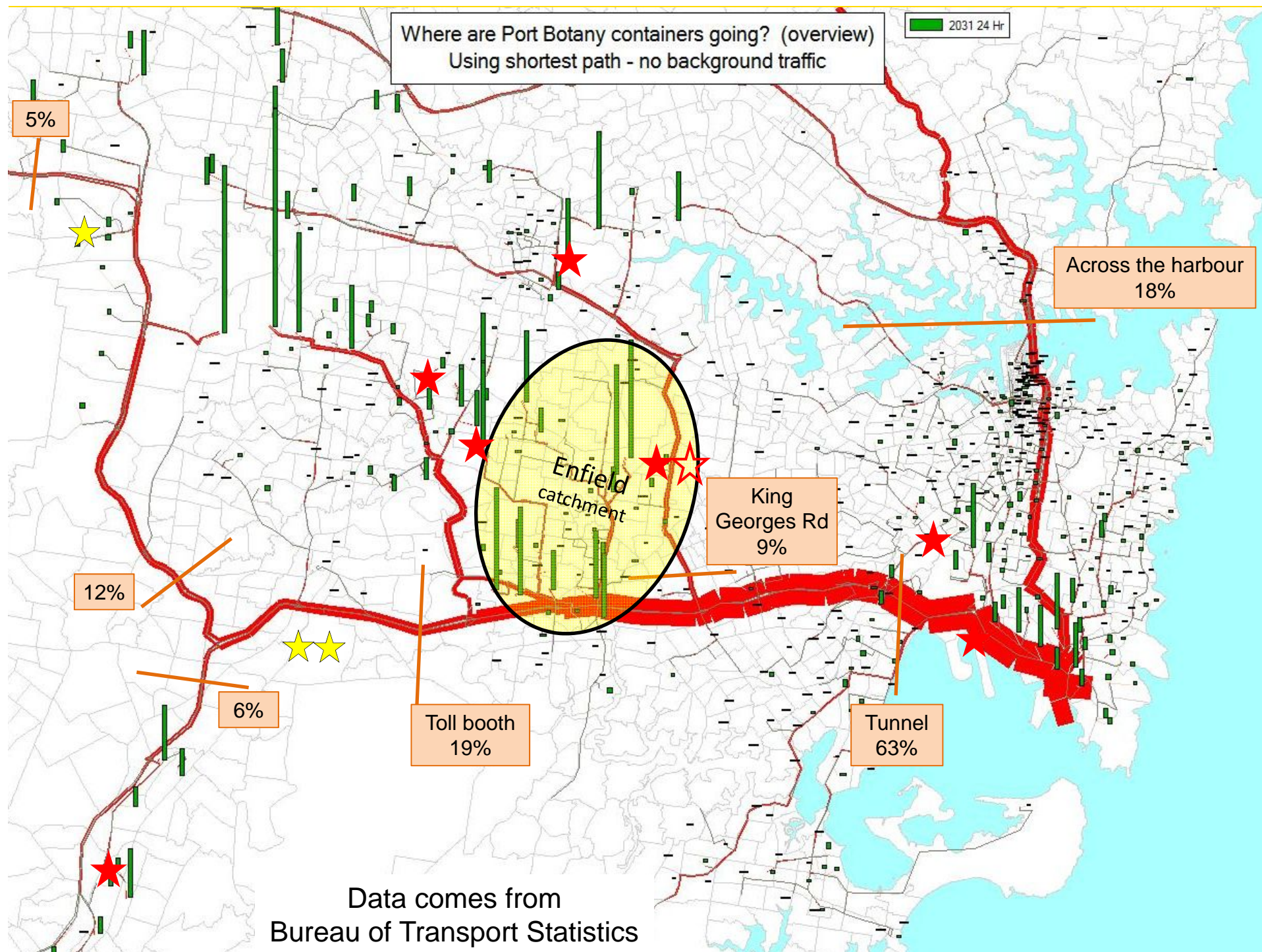


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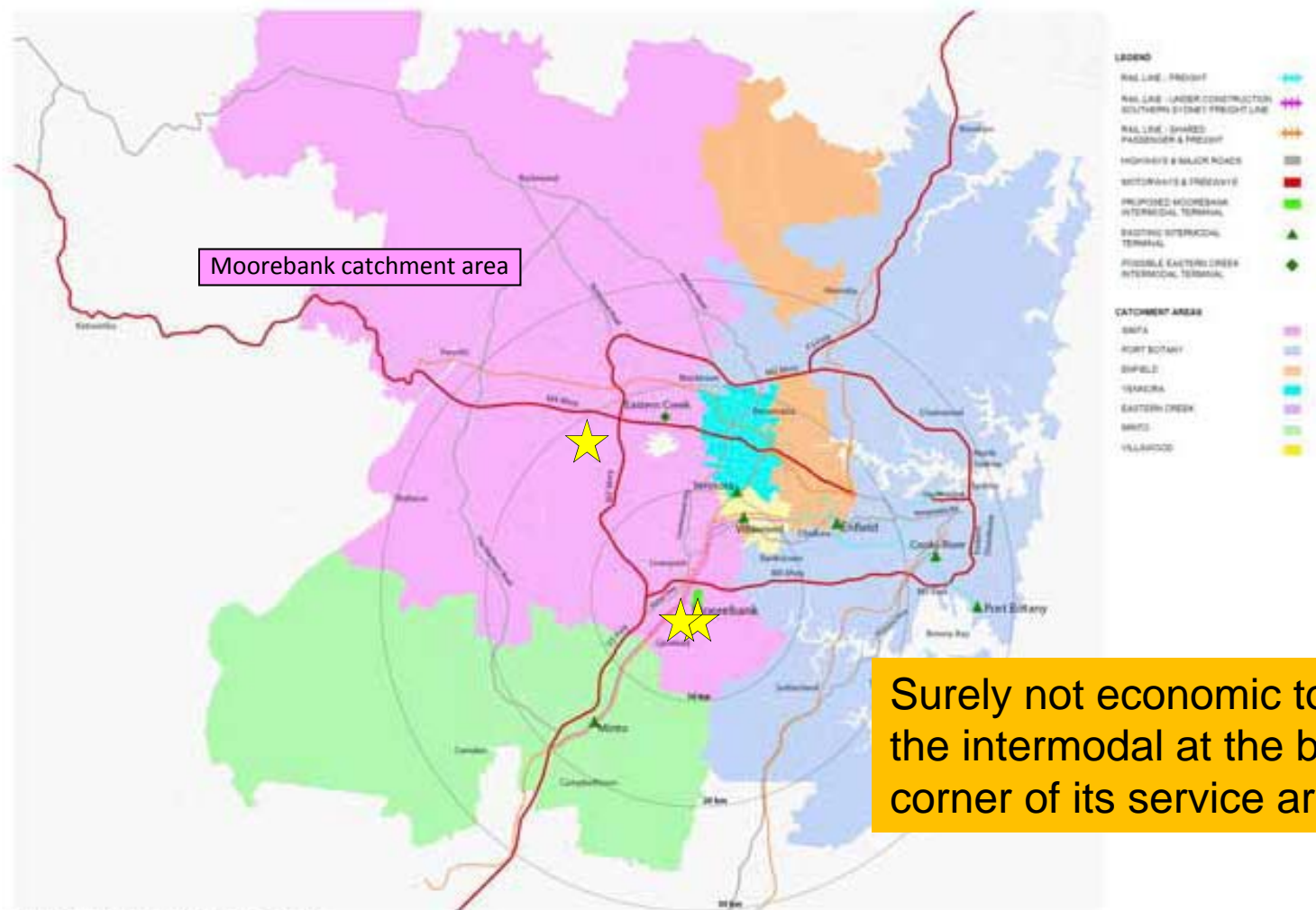
Where are Port Botany containers going?  
Using shortest path - no background traffic





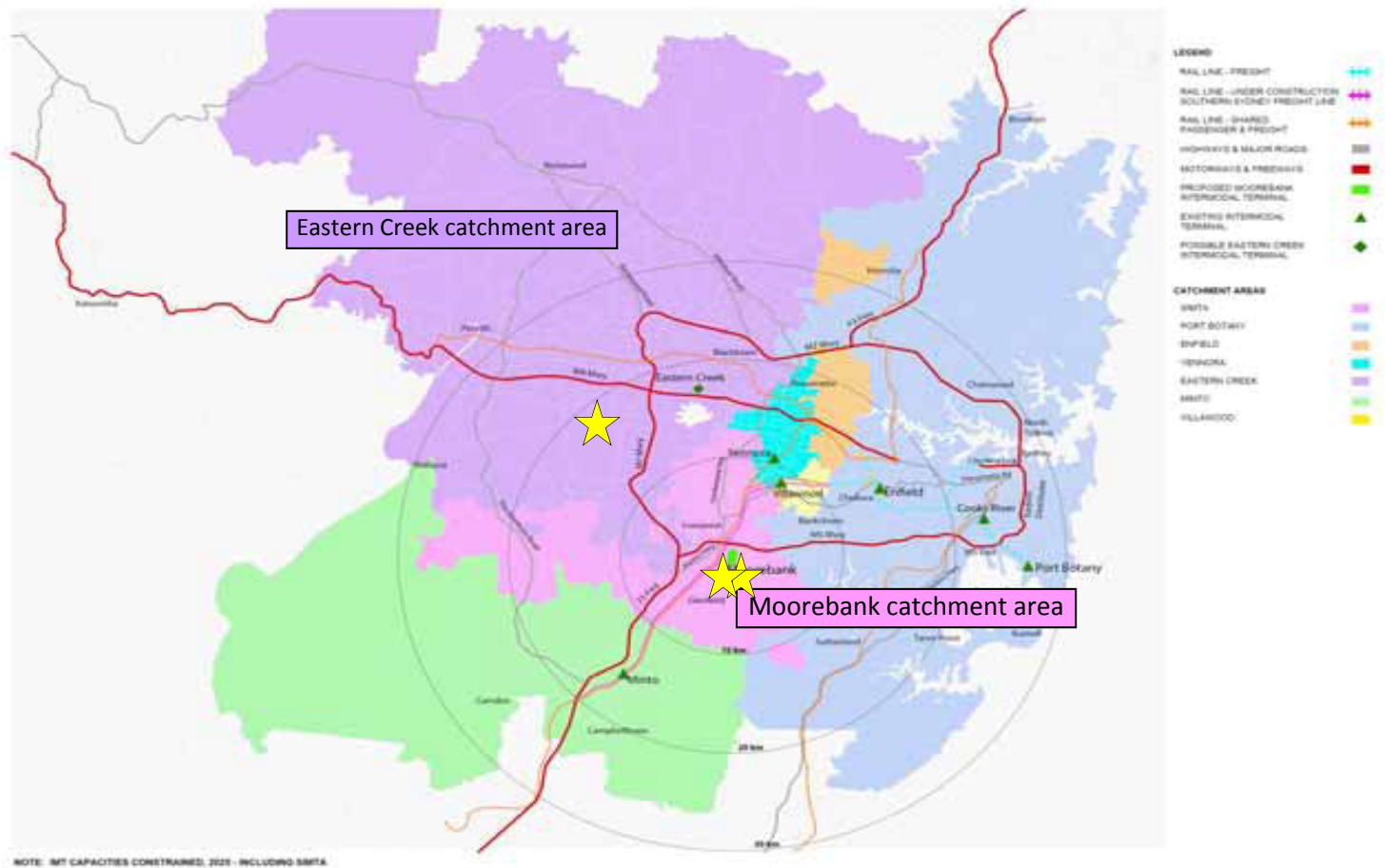
## Moorebank Catchment Area before Eastern Creek is built (from SIMTA report)

FIGURE 11 – MOOREBANK FREIGHT CATCHMENT AREA – WITH SIMTA 2016



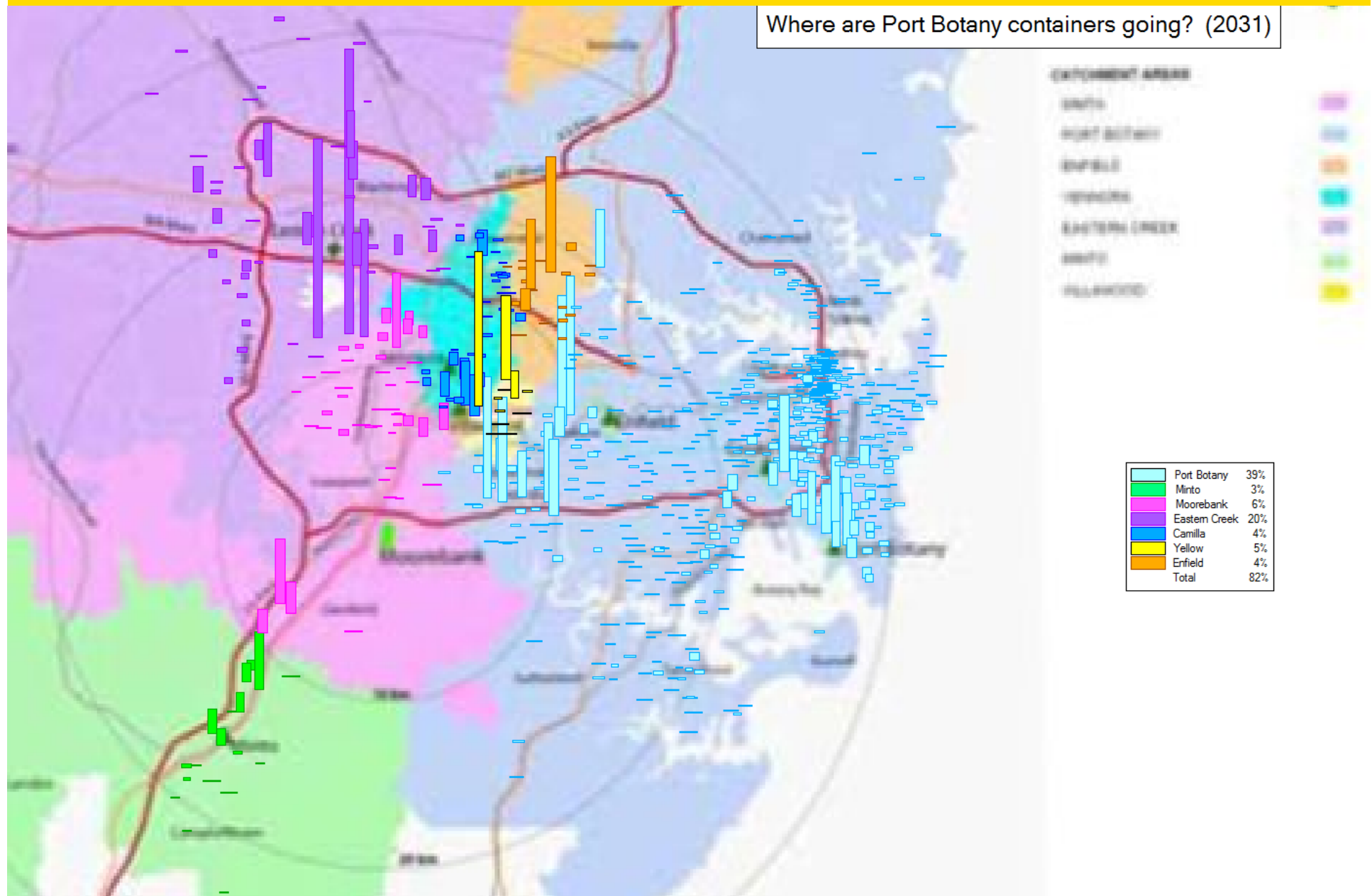
## Moorebank Catchment Area once Eastern Creek is Built (from SIMTA report)

FIGURE 12 – MOOREBANK FREIGHT CATCHMENT AREA – WITH SIMTA 2025



Once Eastern Creek is built is Moorebank really going to be necessary considering Minto is currently growing.

# Where are Port Botany containers going? (2031)



**Eastern Creek  
already  
recommended as a  
preferred site for  
an intermodal**

for a potential truck route to service the terminals, with funding by way of developer contributions; and

- Funding supplementation from the Freight Infrastructure Charge be available to assist in the development of this linkage.

#### ■ RECOMMENDATION 8

It is recommended that:

- Given Menangle's location on the very fringe of Sydney's metropolitan area, the Sydney RailPort Facility's proposal has the potential to provide capacity for the domestic interstate non-bulk freight task and be considered by the Department of Infrastructure, Planning and Natural Resources as an element in the development of a strategy for this market.

#### ■ RECOMMENDATION 9

In order to provide a large intermodal facility in Western Sydney, it is recommended that:

- Eastern Creek be confirmed as the preferred site for a future intermodal terminal;

- A Department of Infrastructure, Planning and Natural Resources planning instrument be used to zone Eastern Creek for this purpose;
- The Department of Infrastructure, Planning and Natural Resources be nominated as the acquisition authority for the relevant land holdings;
- A Master Plan be developed for the site;
- Funds from the Freight Infrastructure Charge be used to secure this site and see it land banked for intermodal development;
- Planning commence for the site's development by the private sector as an intermodal terminal with the capacity to handle at least 500,000 TEUs annually; and
- Development of the site for associated transport and distribution activities be pursued in the shorter term, subject to not compromising its future rail use.

#### ■ RECOMMENDATION 10

It is further recommended that:

- The Department of Infrastructure, Planning and Natural Resources, the Australian Rail Track Corporation and RailCorp commission work for corridor preservation and rail access to Eastern Creek from the Main West Line; and
- Investigations continue in order to determine a future freight rail alignment between Eastern Creek and the Southern Sydney Freight Line.

#### ■ RECOMMENDATION 11

It is recommended that:

- The development of the major, new terminals at Enfield, Moorebank and Eastern Creek include adequate provisions to allow common-user, open-access operations.

#### ■ RECOMMENDATION 12

For new terminals, the following general principles should be adopted:

- Terminals be located adjacent to or close to key distribution and warehousing areas in metropolitan Sydney;
- Terminals be located adjacent to, and with good access to, key arterial road corridors, particularly the M4, M5 and M7;
- Terminal locations be adjacent to dedicated rail freight lines;
- Terminals have the capacity to receive, load and unload 600m push-pull unit trains for the import/export trades;
- Terminals be of sufficient capacity to load full trains either to or from a single stevedore;
- Terminals be of sufficient size to accommodate on site empty container parks and servicing, on site warehousing development, driver facilities including truck and trailer parking, rest facilities, and AQIS Inspection and Customs bonded areas;
- Terminals be available to operate 24 hours a day, seven days a week to maximise the return on investment in the sites and utilise the rail network to its maximum capacity; and
- Terminals be adequately buffered from residential areas in order to minimise noise and light spill.

#### ■ RECOMMENDATION 13

It is further recommended that:

- Community Consultative Committees be mandatory in respect of all terminals;
- These Committees to ensure local residents are kept informed of terminal operations, and provide liaison with operators with a view to minimising the environmental impacts of terminal operations;
- The Government adopt a 'zero tolerance' policy involving heavy penalties in respect of container road traffic travelling through designated residential precincts; and
- Before projects are approved, residential areas surrounding intermodal terminals be designated in order to give effect to this policy.

# This recommendation should be brought forward

In order to provide a large intermodal facility in western Sydney, it is recommended that: Eastern Creek be confirmed as the preferred site for a future intermodal terminal.

July, 2005

## Railing Port Botany's Containers

PROPOSALS TO EASE PRESSURE ON SYDNEY'S ROADS

**What Happened??**

**Was Moorebank  
considered a  
cheaper  
alternative?**

**Not True**



Proposed Eastern Creek

Camellia

Yennora

Leightonfield

Chullora

Enfield

Cooks River

Port Botany

Proposed Moorebank  
Federal Government Intermodal  
(1.7million TEU's)

Proposed SIMTA  
Intermodal (1 million TEU's)

Minto

5 km  
2 mi

- **Traffic**

- **Pollution**

- **Economics**

- **What I want to  
see**

**Traffic Estimates Too  
Low**



Transport  
for NSW

ML12/08846

Ms Narelle van den Bos  
nell@transportmodelling.com.au

Dear Ms van den Bos

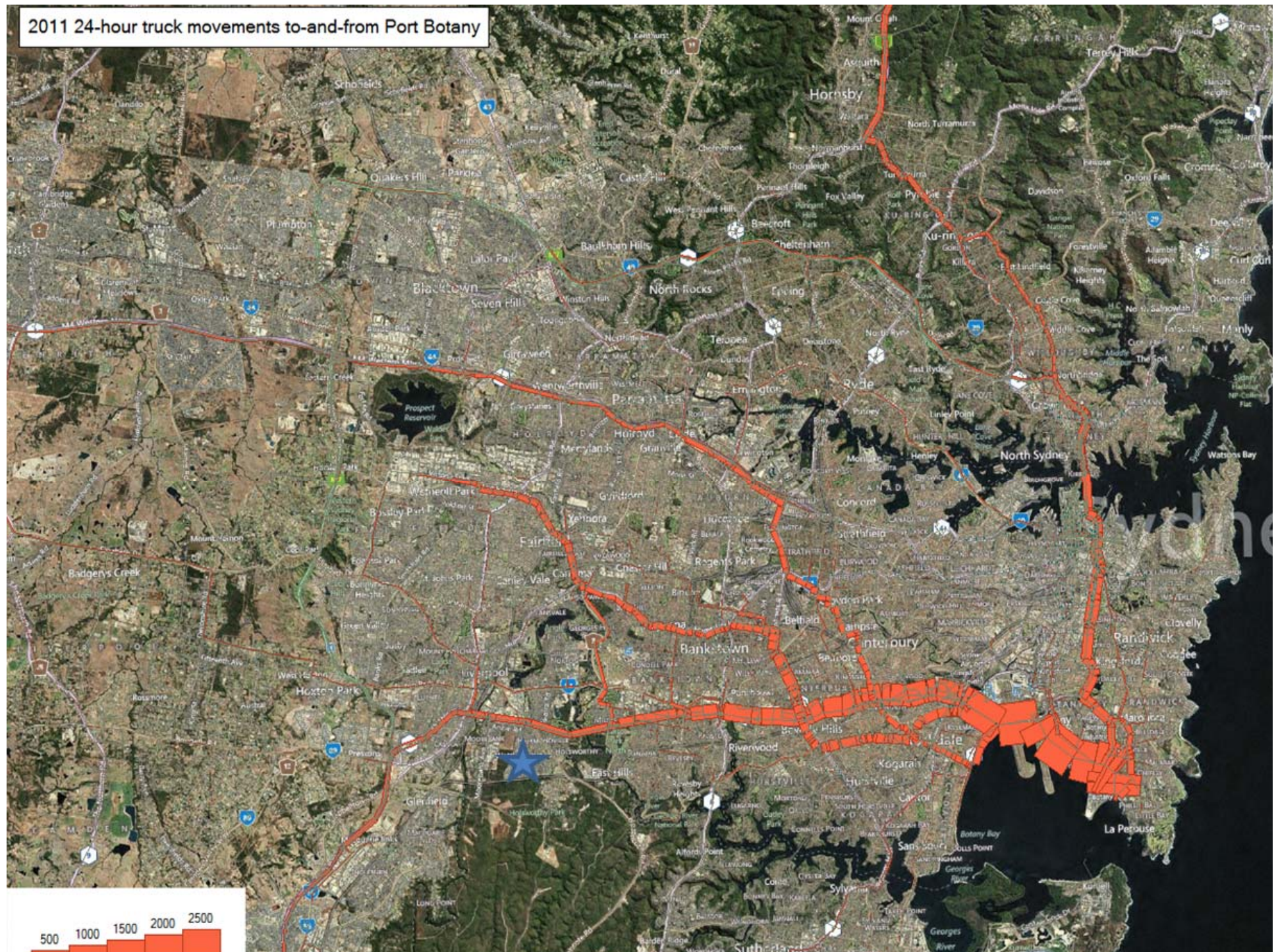
Thank you for your email to the Premier, which was referred to the Minister for Roads and Ports, about the proposed intermodal terminals at Moorebank. The Minister has asked me to respond on his behalf.

As you are aware, the two adjacent intermodal projects at Moorebank, the Commonwealth funded Moorebank Intermodal Terminal (MIT) Project and Sydney Intermodal Terminal Alliance's (SIMTA) privately funded intermodal terminal proposal are in the planning stages. They will have to meet rigorous planning and environmental criteria before a determination can be made on either project. Important community concerns over truck movements and emissions will be addressed through planning and community consultation processes.

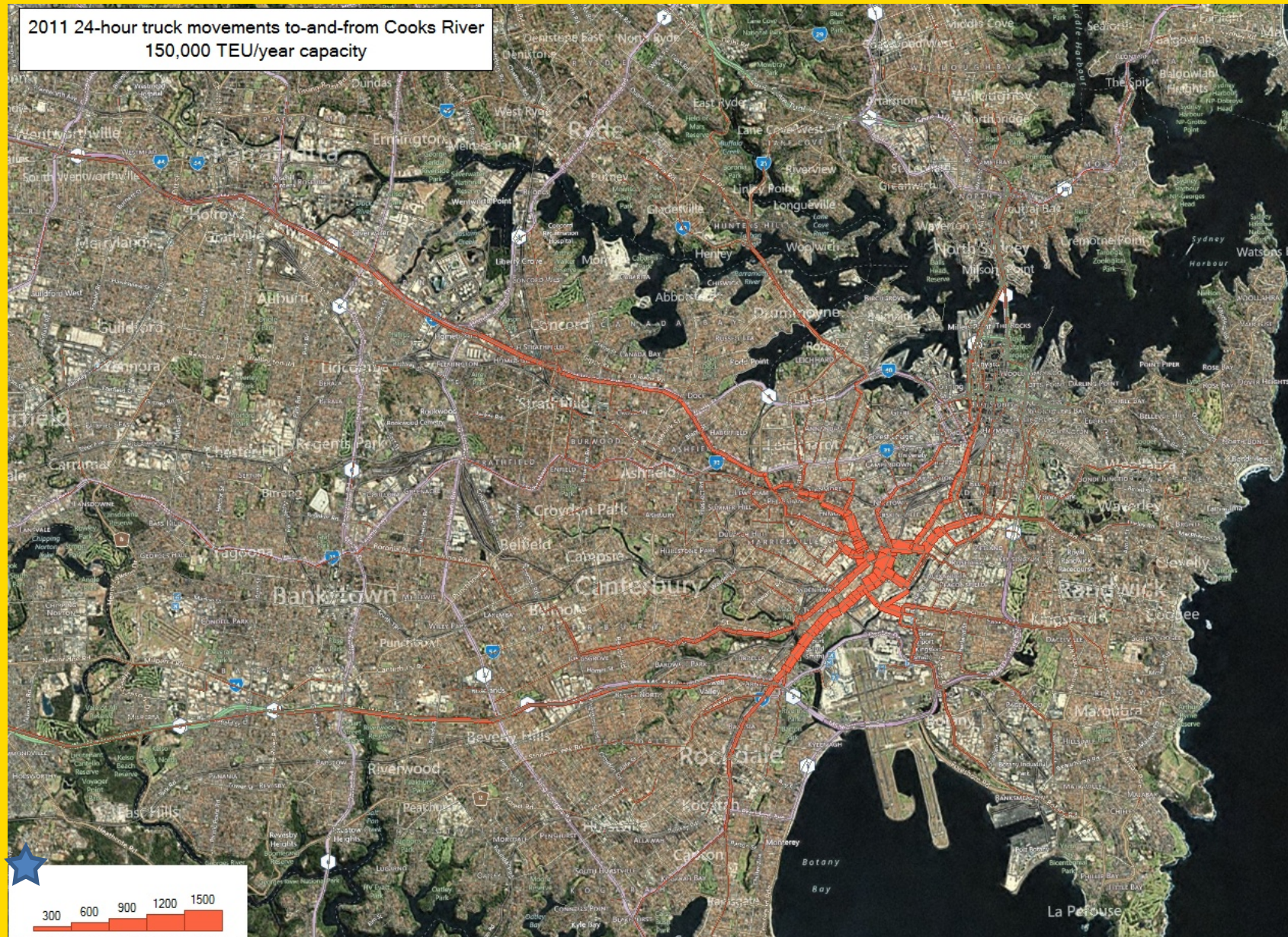
I am advised the Bureau of Transport Statistics is not involved in providing independent traffic modelling for these projects and without access to the data from which you base your concerns, is not in a position to provide further input.

I understand the Commonwealth Government has established a course of action to address the community's concerns about noise, air pollution and increased traffic. The Commonwealth's environmental impact statement (EIS) will address the Director-General's Requirements which the NSW Department of Infrastructure and Planning issued in February 2012 and the Commonwealth's "Guidelines for the Assessment and Management of Impacts from Road Transport" (2011).

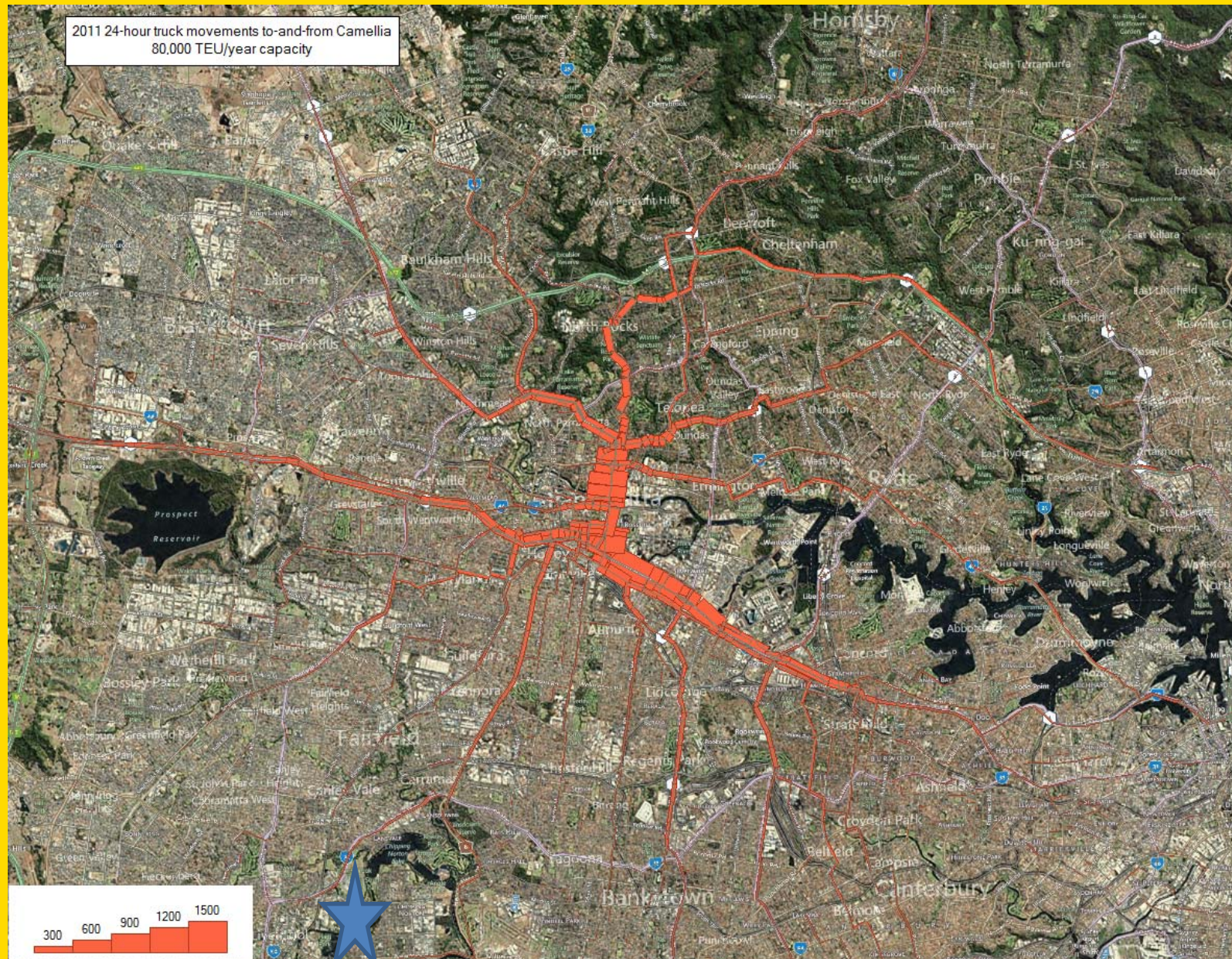
2011 24-hour truck movements to-and-from Port Botany



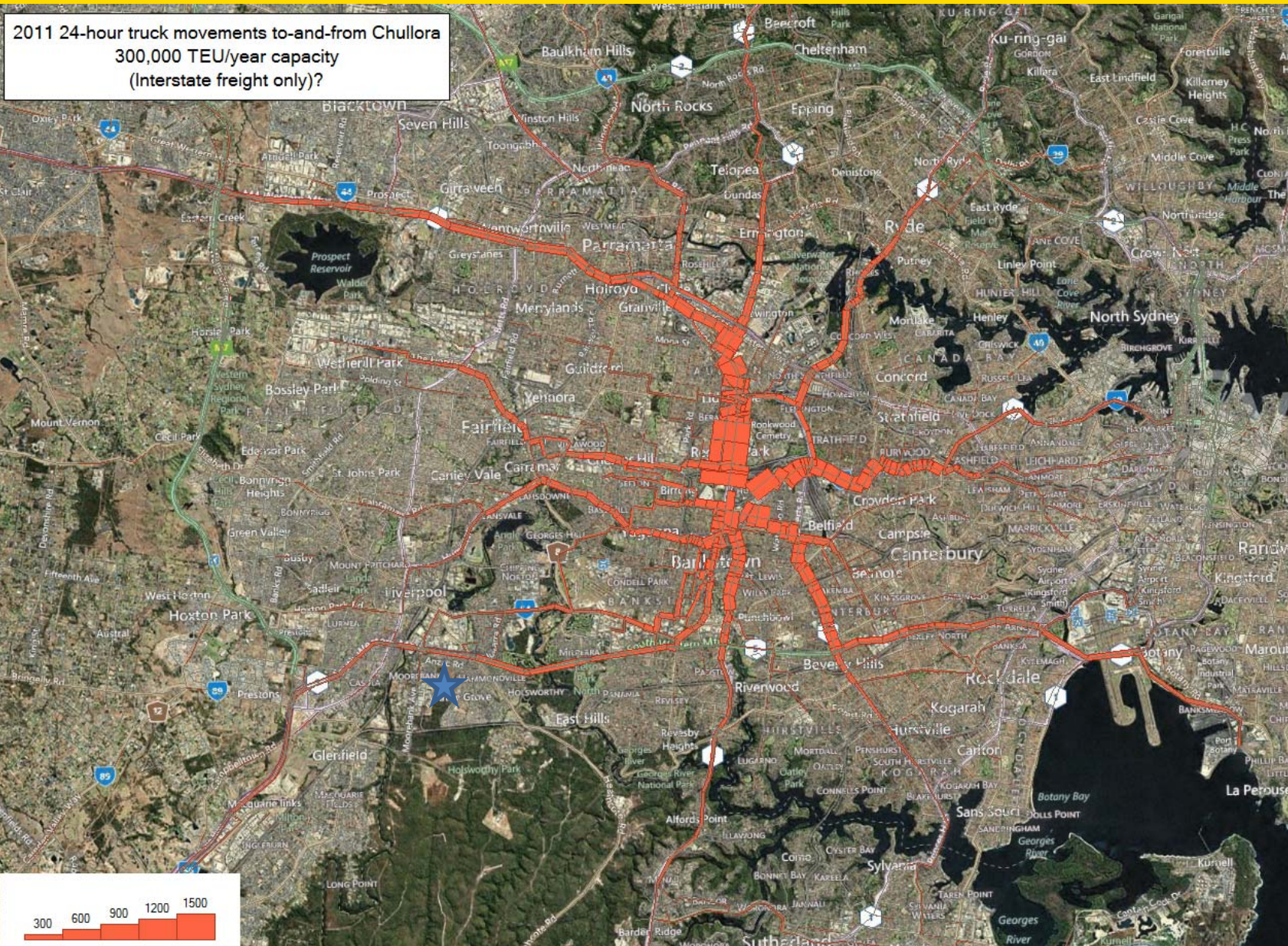
## Cooks River – 150 000 TEU



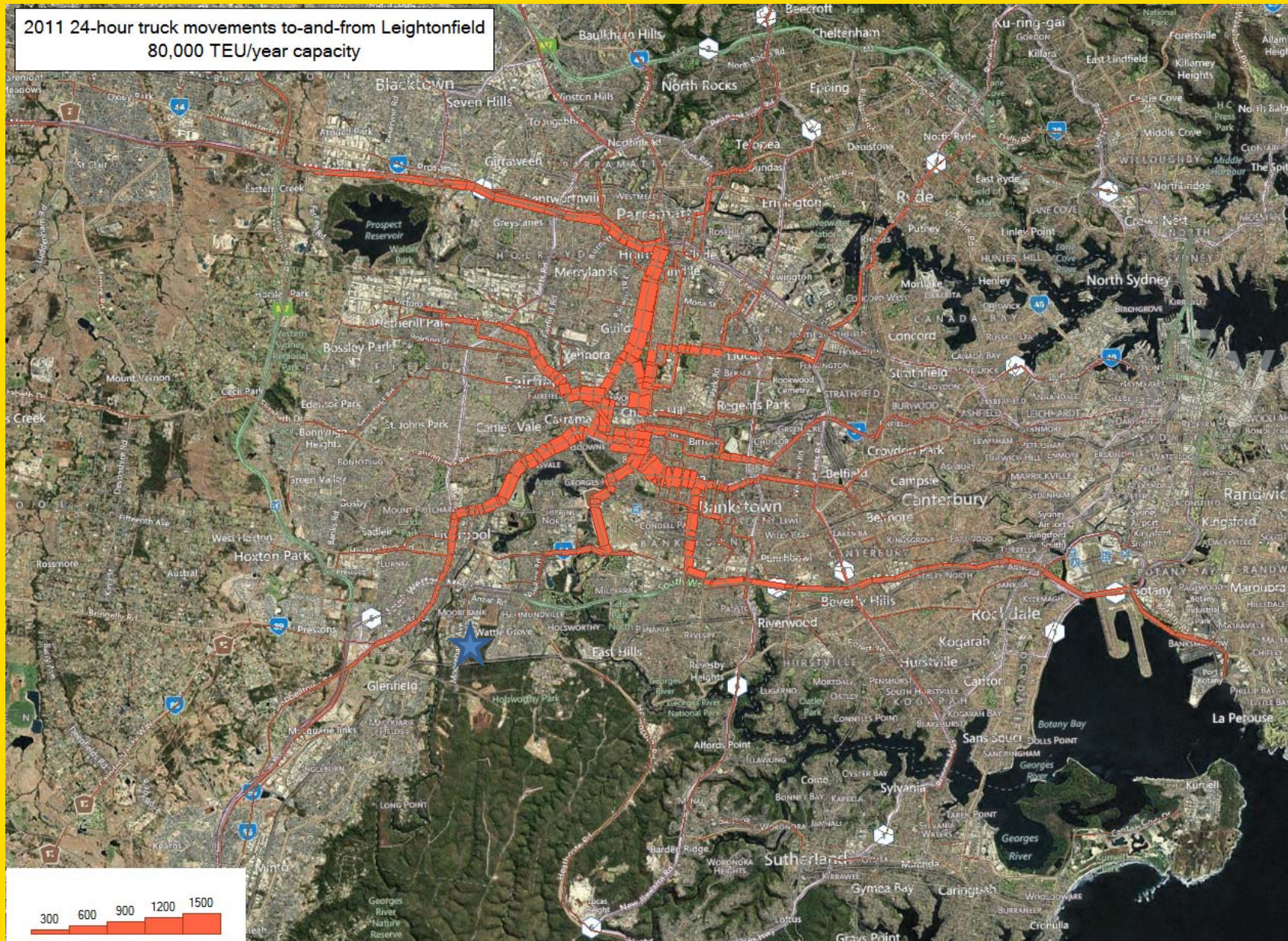
## Camellia – 80 000 TEU “closed” but for how long?



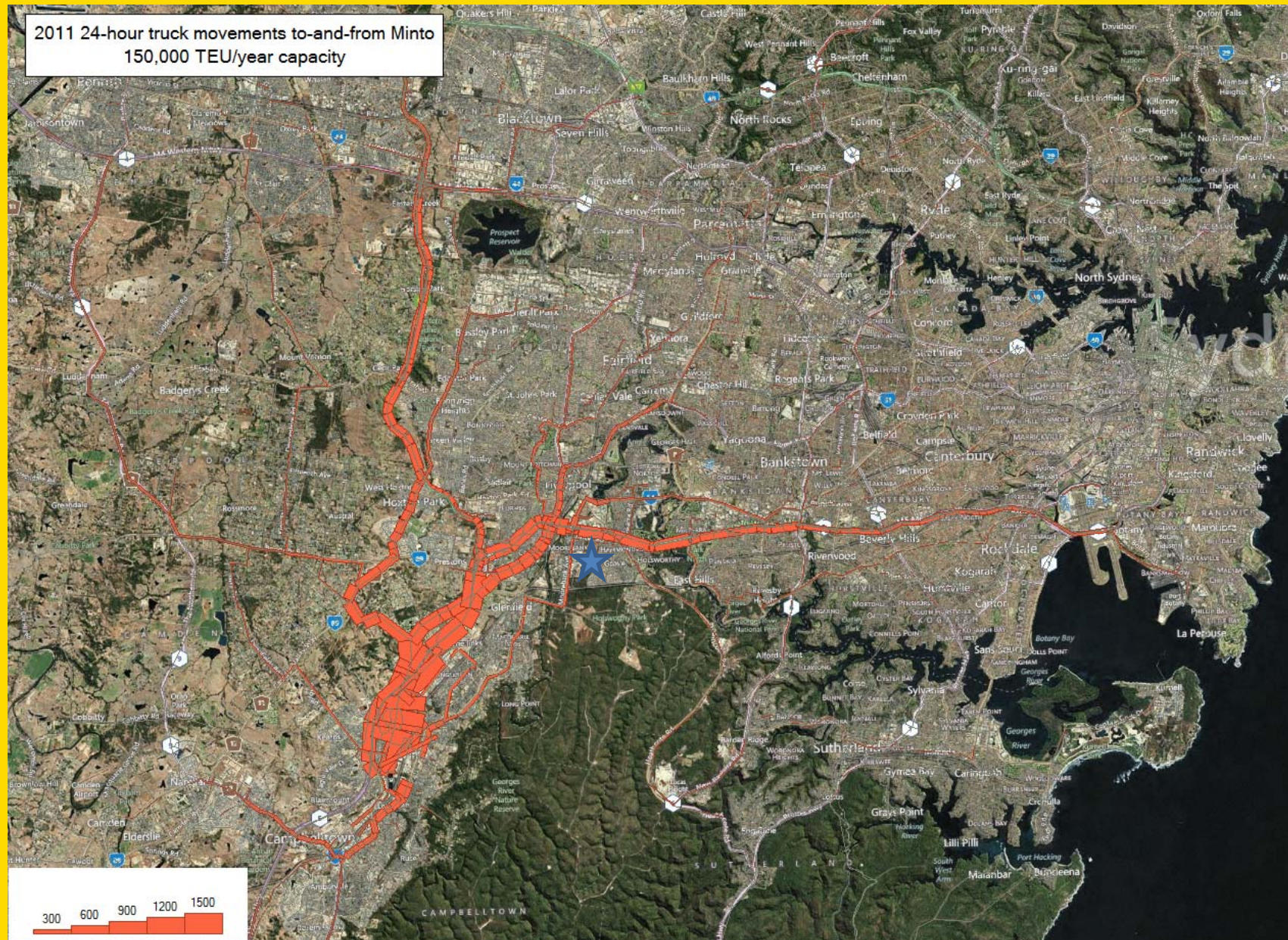
## Chullora – 300 000 TEU (Twenty Equivalent Units)



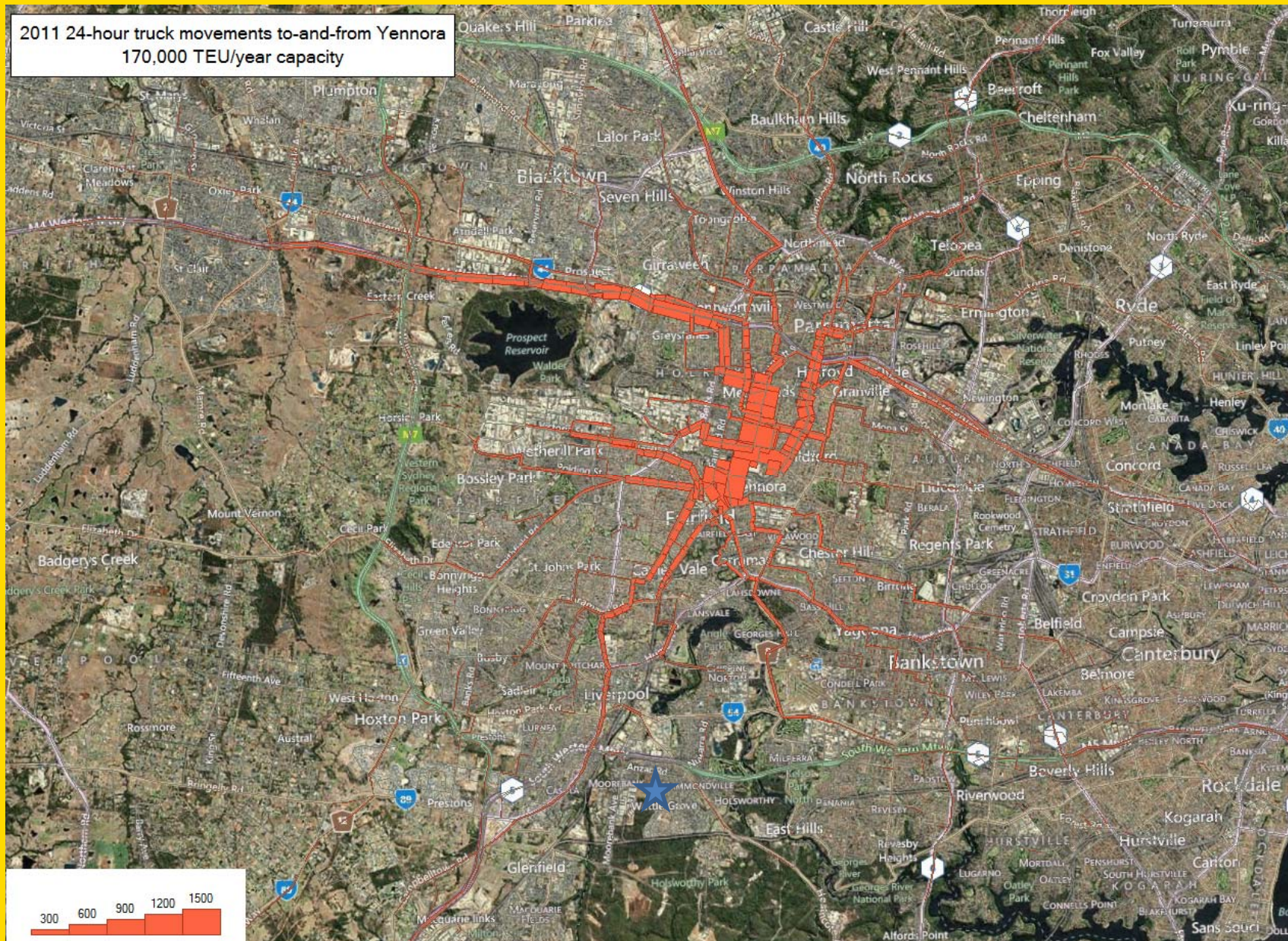
## Leightonfield – 80 000 TEU



## Minto – 150 000 TEU



## Yennora – 170 000 TEU



# 1

# A Sanity Check

<b>Intermodal</b>	<b>TEU</b>	<b>Daily Flow</b>	<b>Factored to 1 Mil TEU</b>	<b>Comment</b>
Port Botany	2,000,000	4,700	2,350	No warehousing

# 1

## A Sanity Check

Intermodal	TEU	Daily Flow	Factored to 1 Mil TEU	Comment
Port Botany	2,000,000	4,700	2,350	No warehousing
Camellia	80,000	5,100	63,300	Warehousing
Chullora	300,000	7,400	24,800	Warehousing
Enfield	300,000	1,500	4,900	Warehousing
Leightonfield	80,000	7,600	95,000	Warehousing
Minto	150,000	5,000	33,000	Warehousing
Yennora	170,000	6,000	35,000	Warehousing
<b>Average</b>			<b>42,666</b>	

# 1

## A Sanity Check

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SIMTA	1,000,000	2,600	2,600	Warehousing
<b>Average</b>			<b>42,666</b>	

# 1

## A Sanity Check

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Minto	150,000	5,000	33,000	Warehousing
Yennora	170,000	6,000	35,000	Warehousing
SIMTA	1,000,000	2,600	2,600	Warehousing
Average			42,666	
TfNSW	2,200,000	20,700	9,409	

If there is an intermodal on the other side of the road with 1 200 000 TEU then this number would be doubled!!!!

Moorebank Project Office is encouraging private industry to take up the 1,250 ha of employment land for warehousing to feed the Moorebank Project Office!!

# 1

## A Sanity Check

The government Intermodal capacity is 1.7 million containers.

Could be looking at more than 2 times the truck trips.

**Not 42,000 truck trips a day but 84,000 truck trips per day**



Traffic engineers calculate each truck as equal to 2 passenger car units.

Sydney Harbour Bridge has about 160,000 trips per day

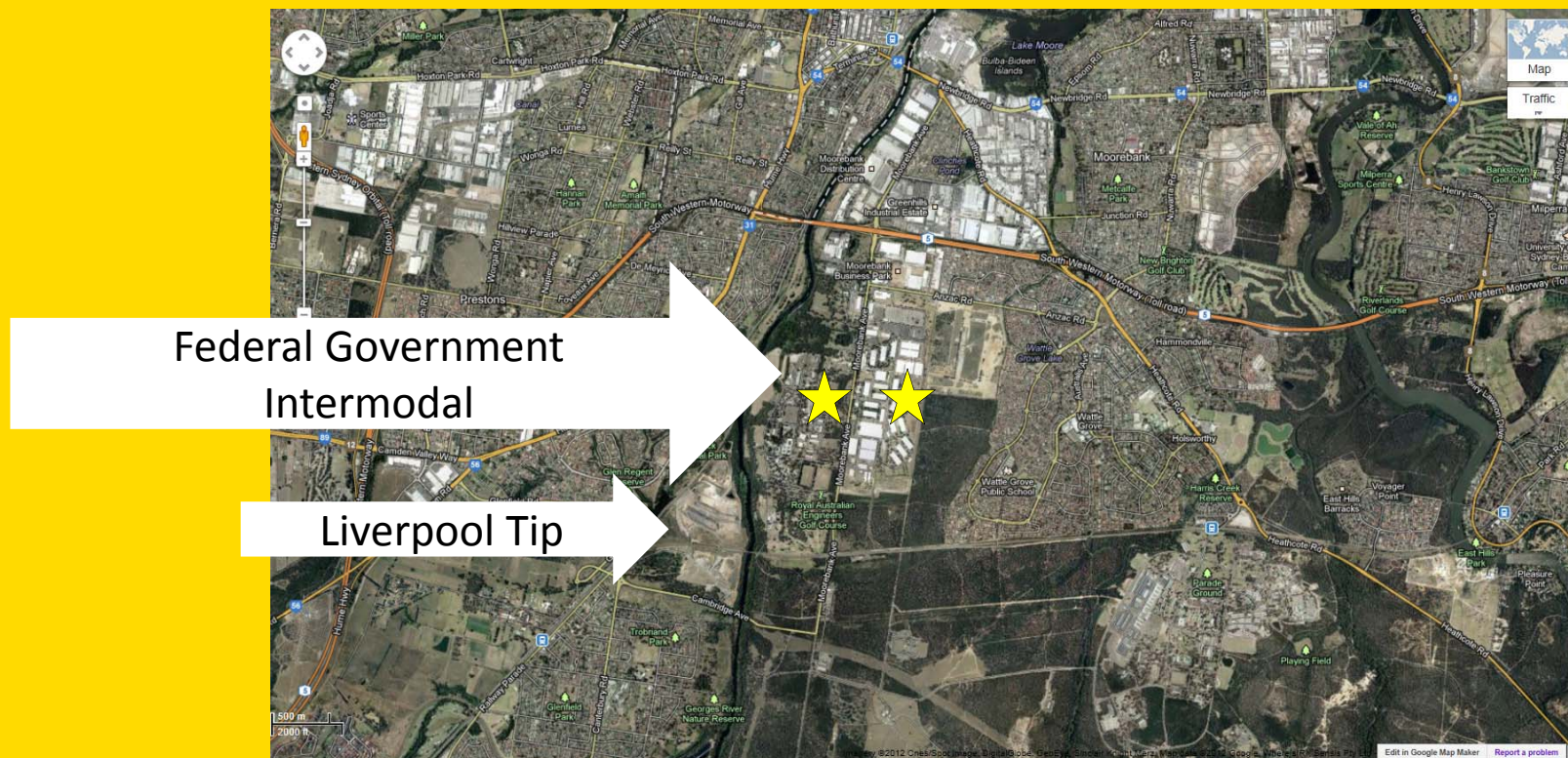
We are concerned about the order of magnitude.

**This would require unrestrained infrastructure and warehousing space.**

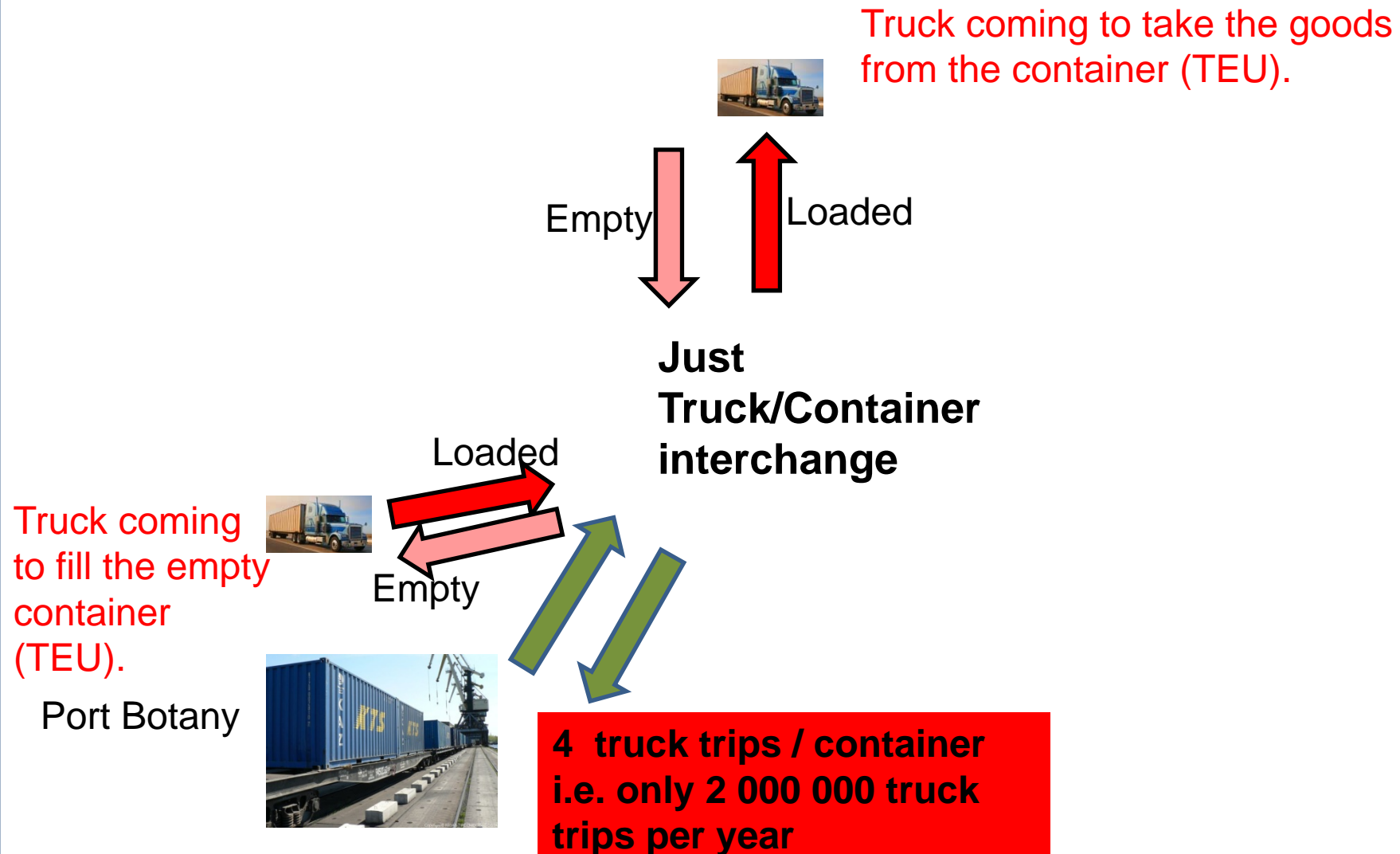
# 2 Induced Traffic – Traffic coming from warehousing outside the site

We believe that the TfNSW (Transport for NSW) estimate is low because:

- the estimated 20,700 could not reflect all the induced traffic associated with the warehousing within SIMTA
- the **trade press** already refers to the potential of the Liverpool tip being turned into a warehouse precinct
- other locations are being rezoned for possible warehousing

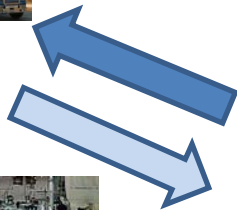


# No Warehouse Facility



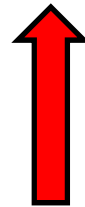
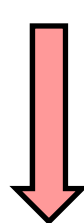
# Warehouse Facility

Goods coming to fill the containers and trucks

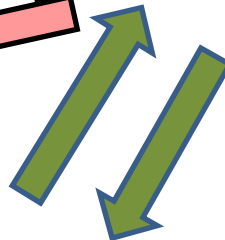
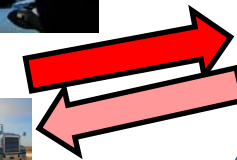


It is not just one truck per container because of the warehouse one container can produce many trucks

Truck coming to take the goods from the container (TEU).



Truck coming to fill the empty container (TEU).



Port Botany



Maybe 16 truck trips / container



# 3

**Background Growth is not included in the study.**



**A population the size of Canberra  
has to be able to get to work and  
to the Liverpool CBD**

**Liverpool  
Infrastructure  
not Able to  
Cope**

## CASE STUDY 13: SUPPORTING THE DEVELOPMENT OF THE MOOREBANK INTERMODAL PRECINCT

The Moorebank precinct has been identified by the Commonwealth and NSW Governments as a key strategic location to increase intermodal capacity. Two intermodal terminals are planned in the precinct; the Moorebank Intermodal Terminal (MIT) has been proposed by the Commonwealth Government for the western side of the precinct, and a privately funded Sydney Intermodal Terminal Alliance (SIMTA) has been proposed for the eastern side. Once complete, these two IMTs are expected to result in up to two million TEU of intermodal terminal capacity.

TfNSW expect the development of these two intermodal terminals in the Moorebank precinct to place significant strain on the surrounding local road network. While not all effects of terminal developments have been identified at this time, initial analysis suggests the following impacts to the local road network:

- Travel demand on the section of the M5 Motorway between the Hume Highway at Casula and Moorebank Ave is expected to exceed capacity as early as 2016.
- The absence of west facing ramps from the M5 to the Hume Highway results in a significant number of vehicles using Moorebank Avenue to access the Liverpool CBD.
- By 2026 growth in background traffic will result in peak spreading and traffic conditions similar to the existing peak period in the Liverpool area and on the M5, persisting for most of the day.
- Key intersections providing access to the Moorebank intermodal precinct will exceed capacity with volumes, especially of turning vehicles, resulting in extensive delays, with queuing sufficient to disrupt through movement.

To support the development of the Moorebank intermodal terminals and meet the challenges posed by impact on the local road network, TfNSW is seeking to provide road network upgrades. The specific goals of these upgrades include:

- Providing additional capacity and traffic reliability on key routes accessing the precinct.
- Ensuring full access to the precinct for High Productivity Vehicles (HPV), including Higher Mass Limit (HML) vehicles.
- Managing the needs of the precinct in terms of road access while addressing negative externalities for the surrounding community and environment.

TfNSW has prepared a Nation Building 2 submission to undertake modelling and economic analysis to determine the optimal road upgrade package to meet the needs of the developed Moorebank intermodal terminal precinct.

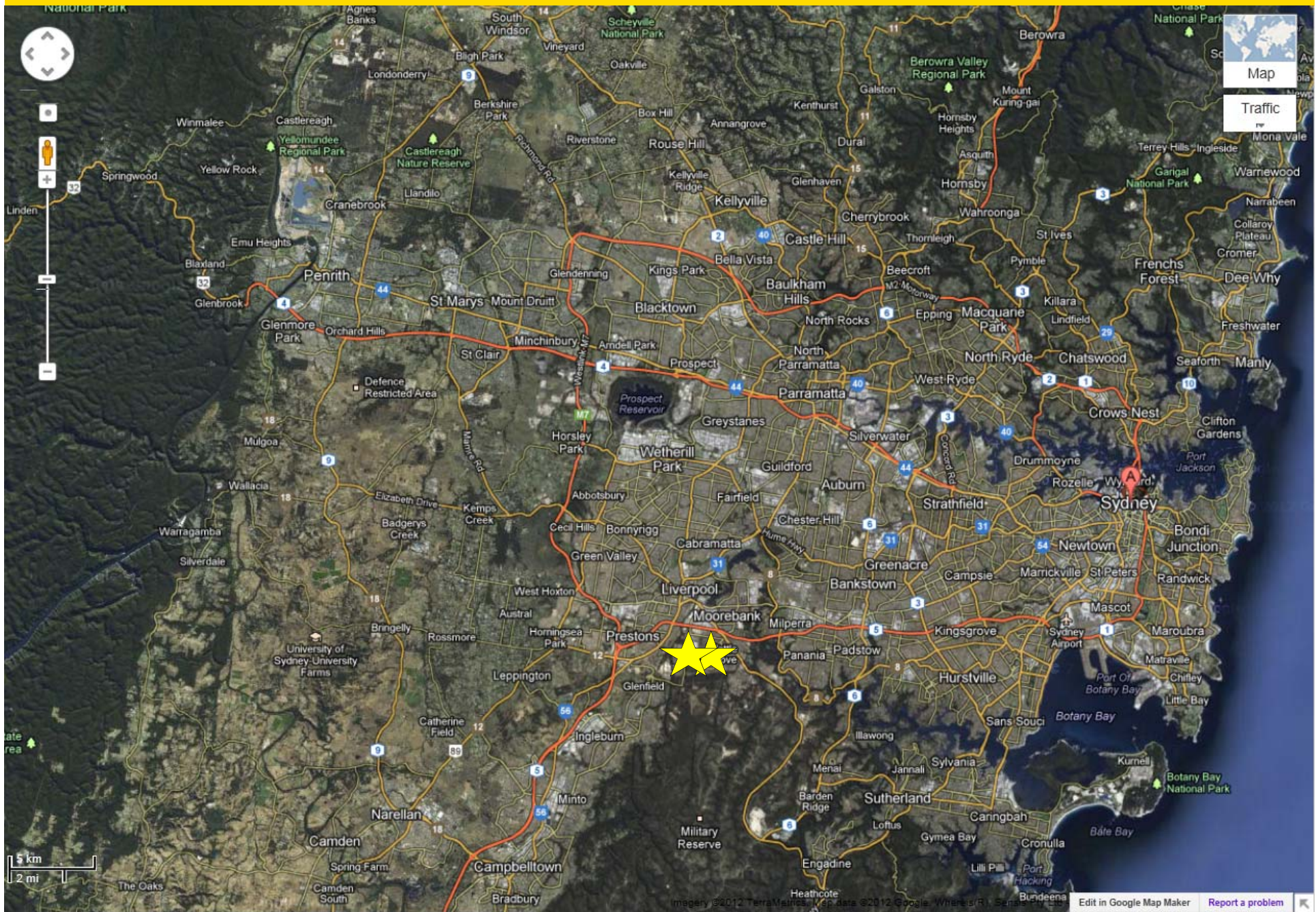
### DRAFT NSW FREIGHT AND PORTS STRATEGY

November 2012



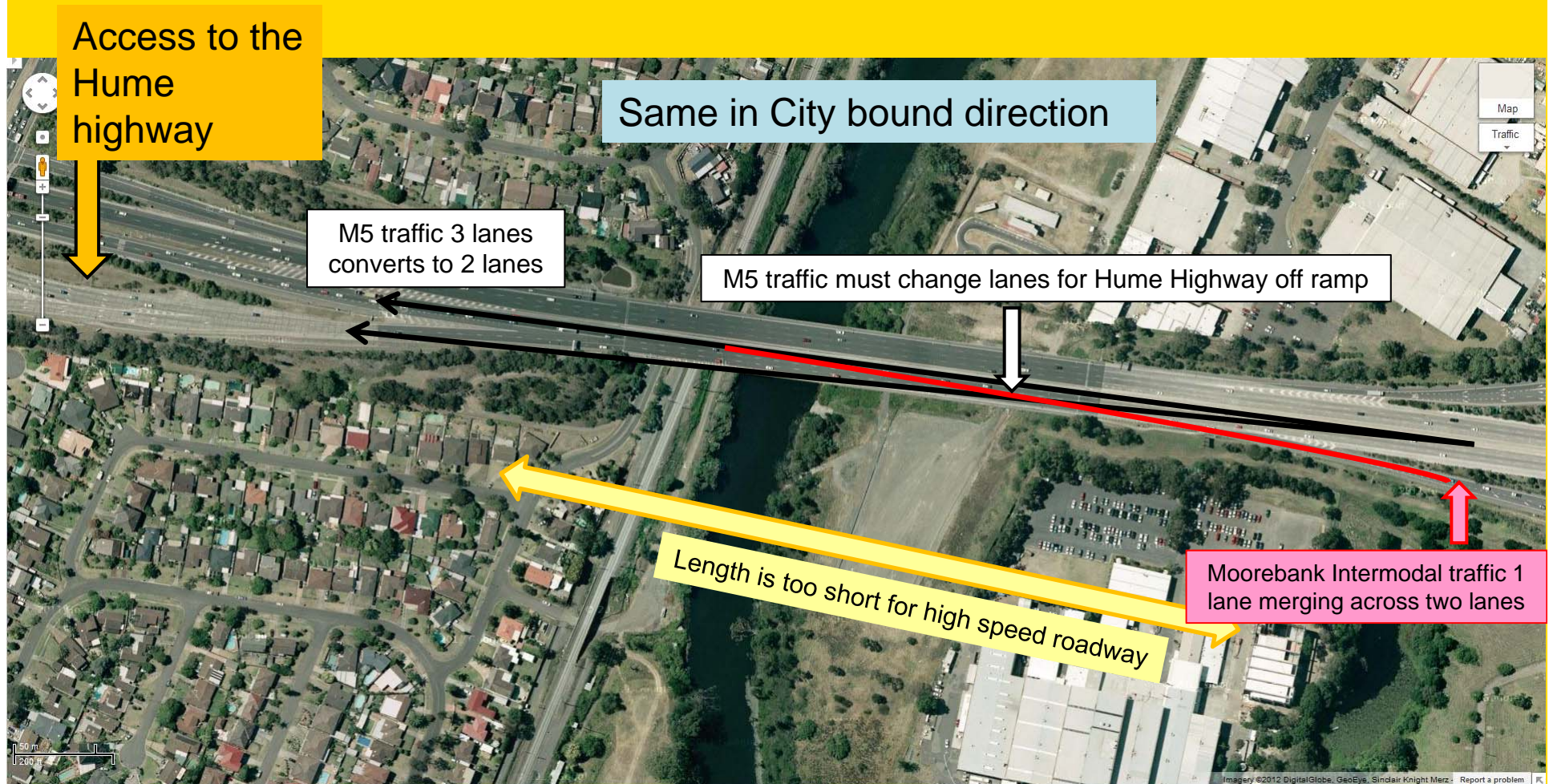
NSW Transport for NSW

**M5 Access –  
Accidents Waiting to  
Happen**





## SIMTA identifies EXISTING traffic issues: M5



### Existing condition

Traffic speed between 50 – 60 km/hr. Sign posted speed: 100 km/hr

# Who Pays for Accidents??

\$

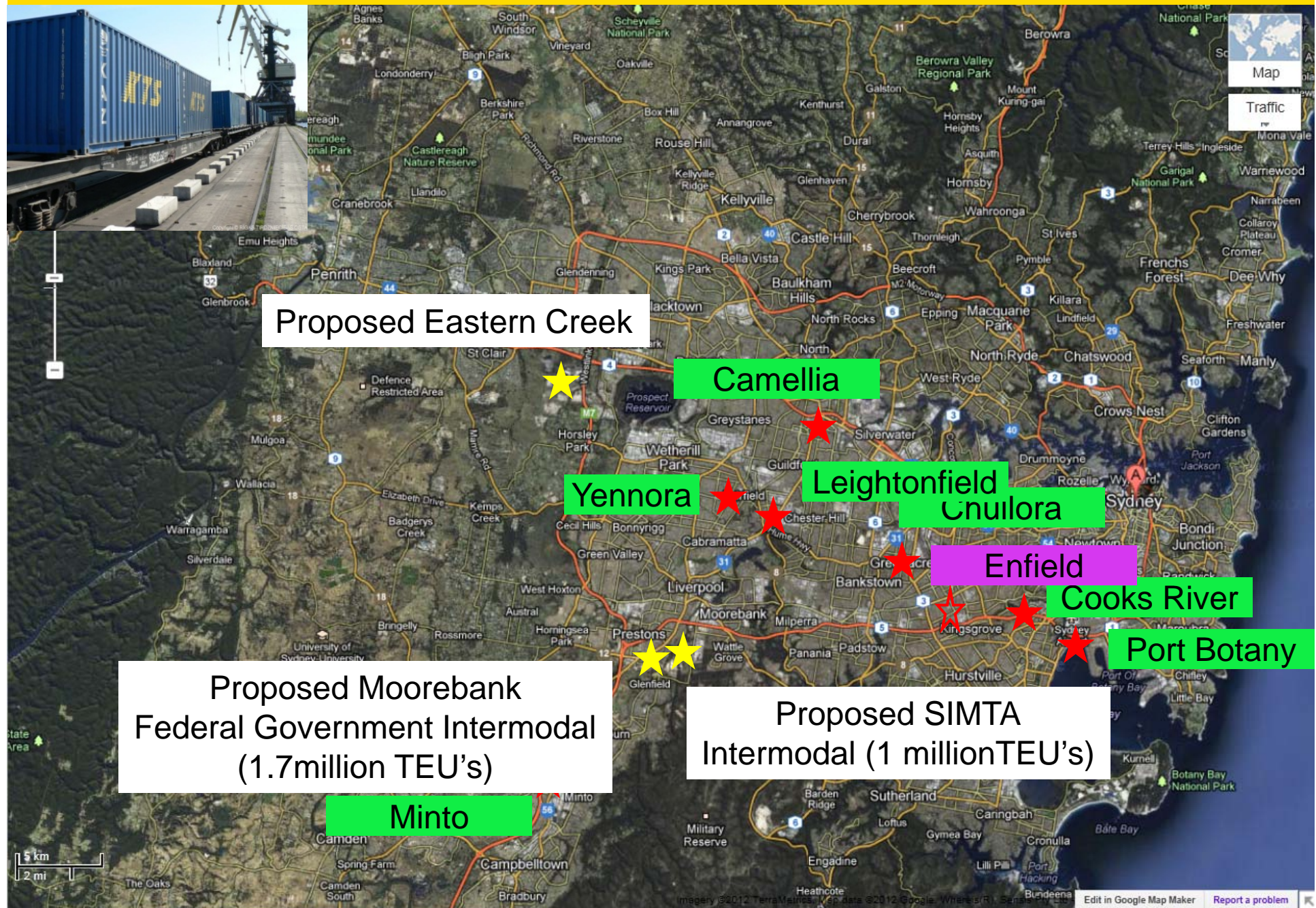
\$

\$

# Moorebank has 350 m to merge and change lanes



We have found ourselves amid inaccuracies propagated by both SIMTA and the Federal government.



# Eastern Creek has 1,200 m to merge and change lanes

## No Access Cost



**\$ Who Pays for M5  
Access likely to be  
complex and  
expensive?**



**\$**

**\$**

**\$** If the cost is not recognised before the project begins then it is likely Liverpool will be given a cheaper patch up which will not be sufficient



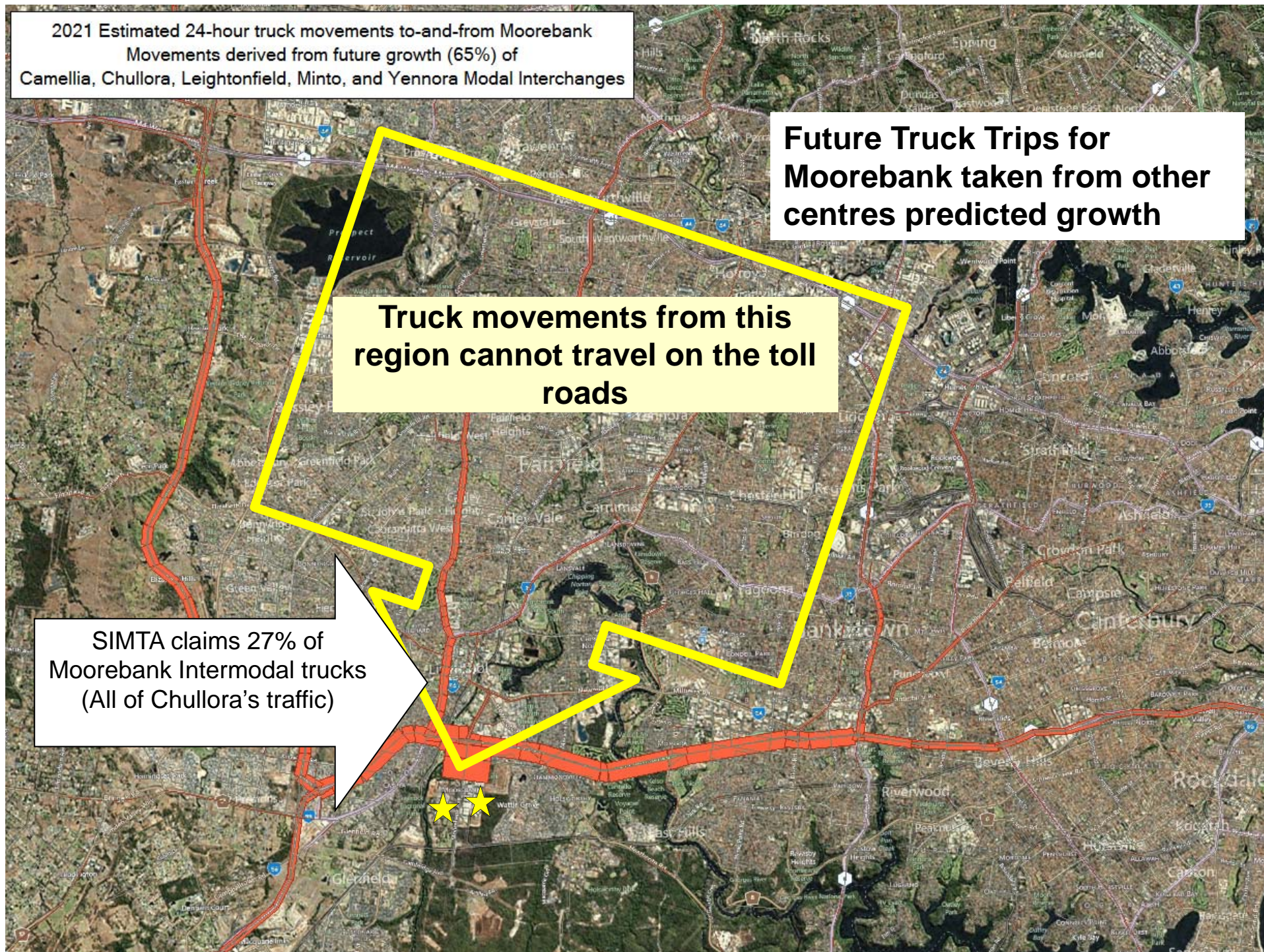
**27% Intermodal  
Traffic is to go onto  
the Hume Highway  
Liverpool CBD  
Virtually Inaccessible**

2021 Estimated 24-hour truck movements to-and-from Moorebank  
Movements derived from future growth (65%) of  
Camellia, Chullora, Leightonfield, Minto, and Yennora Modal Interchanges

**Future Truck Trips for  
Moorebank taken from other  
centres predicted growth**

**Truck movements from this  
region cannot travel on the toll  
roads**

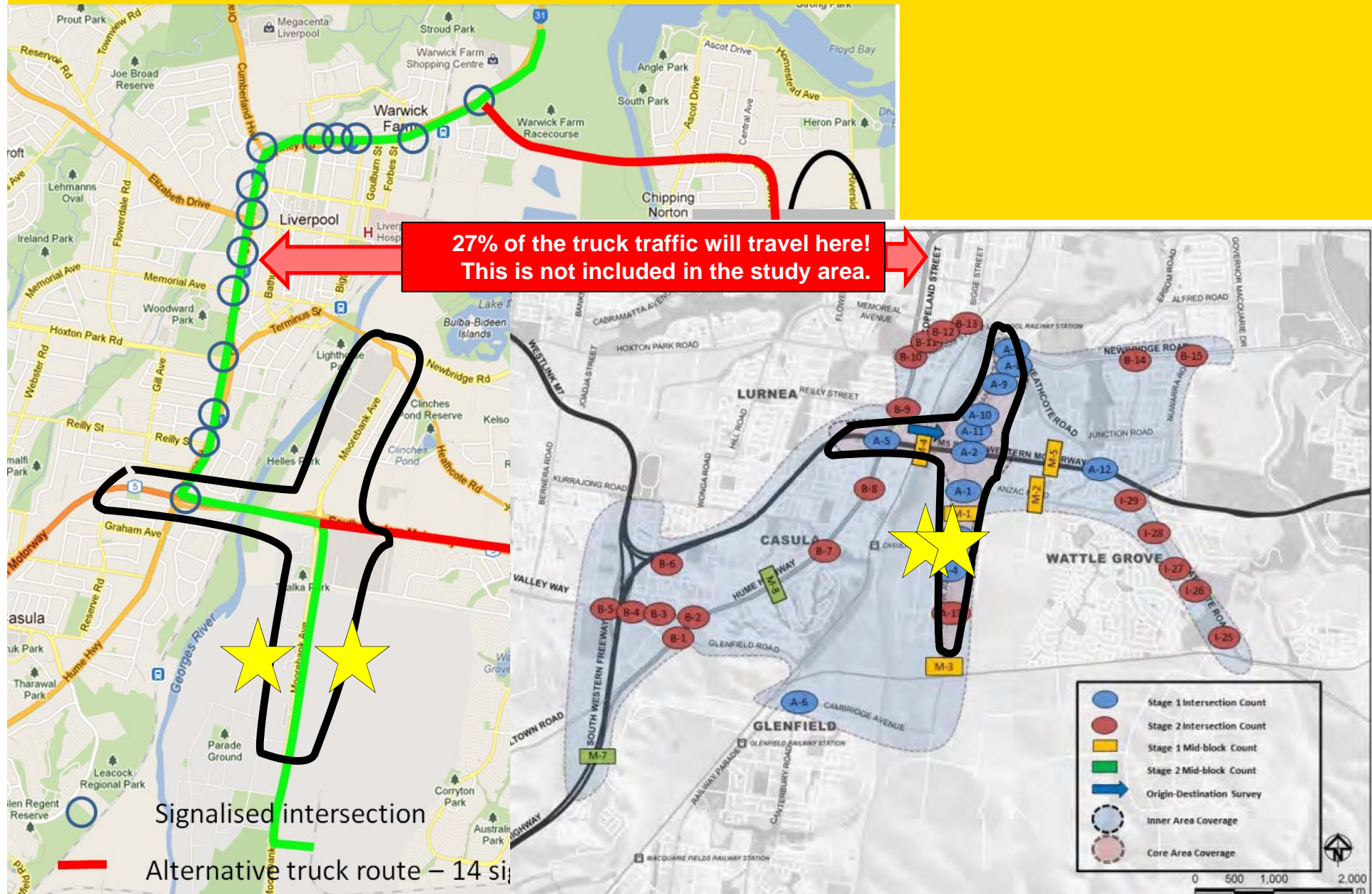
SIMTA claims 27% of  
Moorebank Intermodal trucks  
(All of Chullora's traffic)



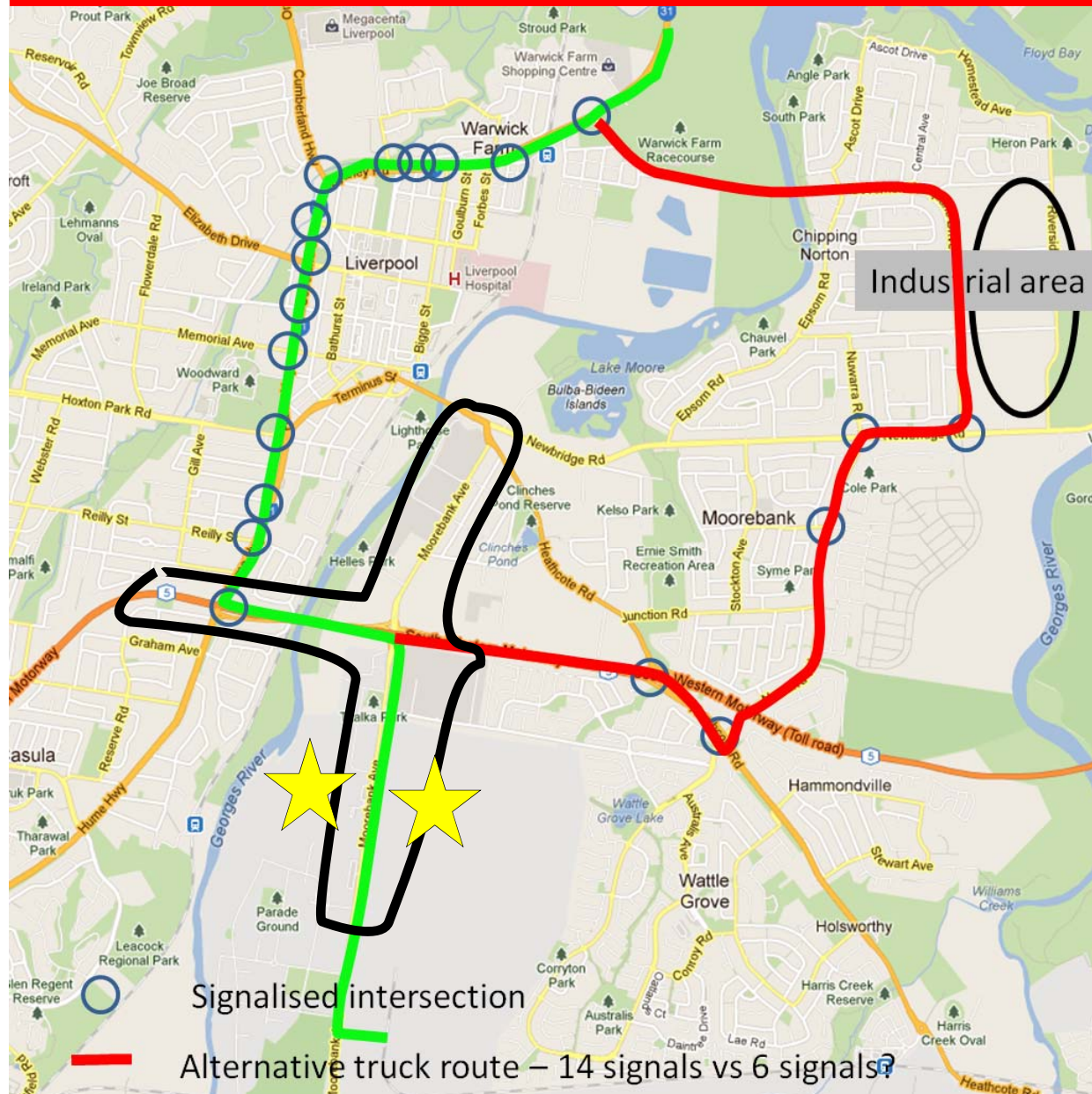
# CBD Cut Off During Peak Hours



# SIMTA did not Study this Section of the Road which has the highest accident hot spot in Sydney.



# B – Doubles and B Tipples stop starting at 14 sets of traffic lights will certainly add to the pollution



This plot is copied out of SIMTA, Traffic and Transport, Volume 1. SIMTA's modelling indicates that 27% of all of SIMTA's traffic will travel on the Hume Highway. This plot is for AM peak, the PM peak would not be much different.

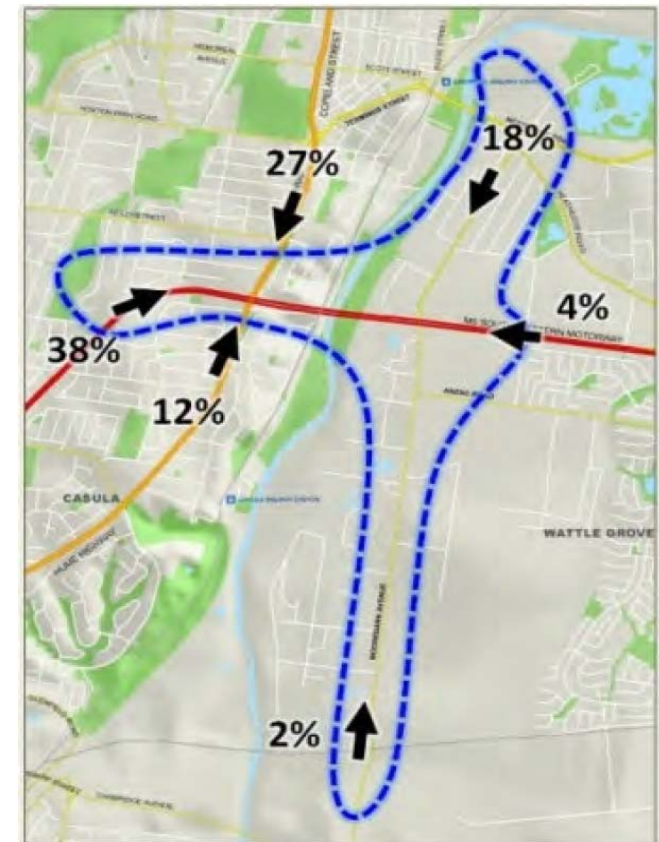
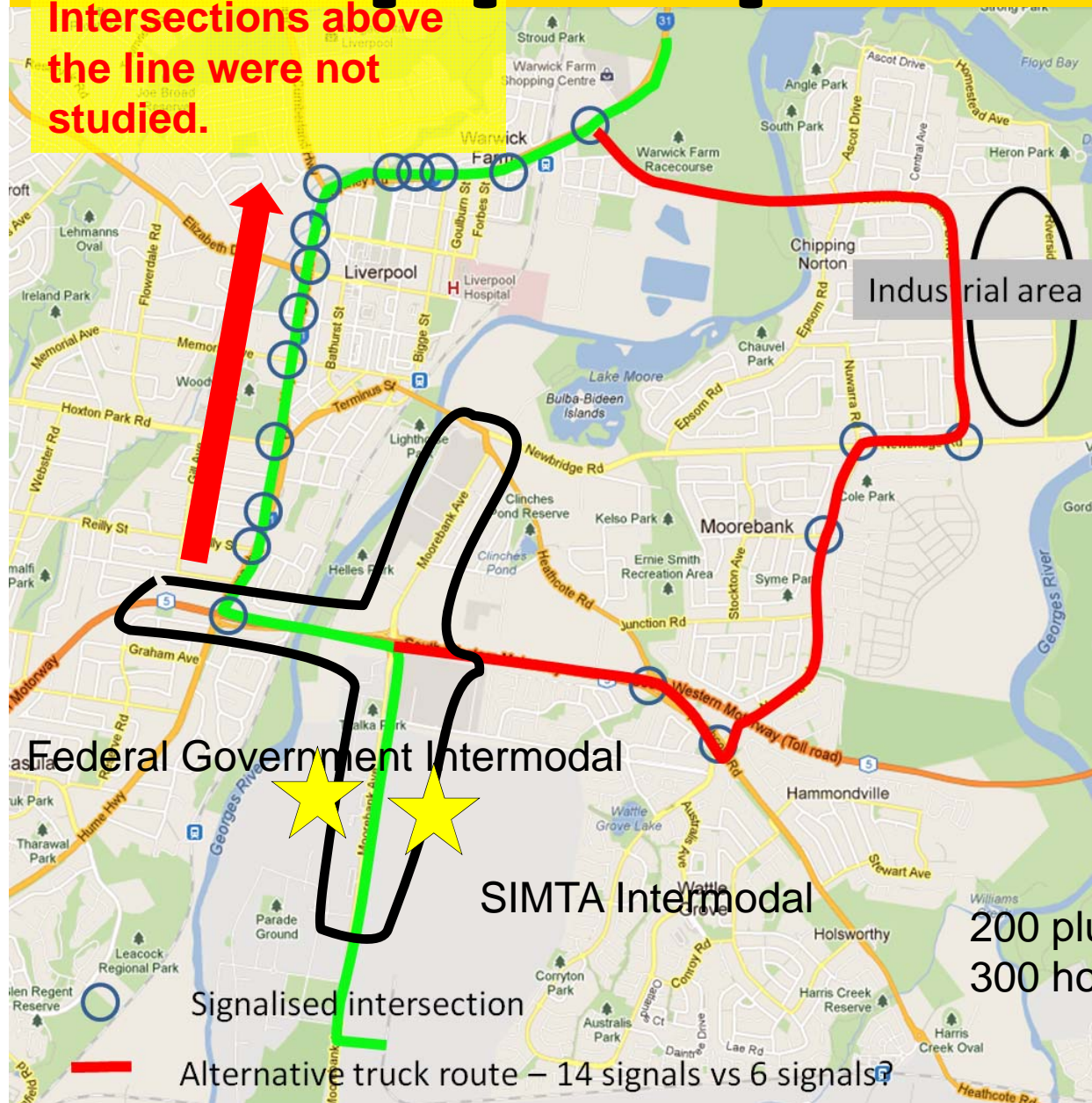


Figure 7-6 Inbound Truck (Rigid and Articulated) Distribution to Si

# Inappropriate path

**Intersections above the line were not studied.**



## 14 Traffic Lights between the M5 and Governor Macquarie Dr

## Inappropriate path

- Bisects the residential area (too close for carcinogen exposure)
- Preschool on north side
- One lane both ways bridge
- Already Congested

200 plus houses + golf course  
300 houses

**Hume Highway  
Liverpool - Worst  
Accident Hot Spot**

Print Email Facebook Twitter More

## Insurer reveals Sydney's worst car accident

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.

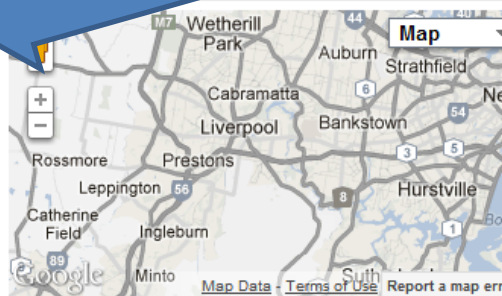
"Most of these accident hot spots tend to be high traffic and tend to have relatively high speed limits and whenever you get that many cars and that concentration, all it takes is very simple lapses in concentration for something to go wrong," he said.

He says there were almost 200 crashes in the worst area.

"You're looking at about 190 accidents for the top spot in Sydney which doesn't sound like a lot on its own but that's more than one every two days and when you think there's 4 and a half thousand kilometres of roadway in Sydney itself, that's quite a concentration."

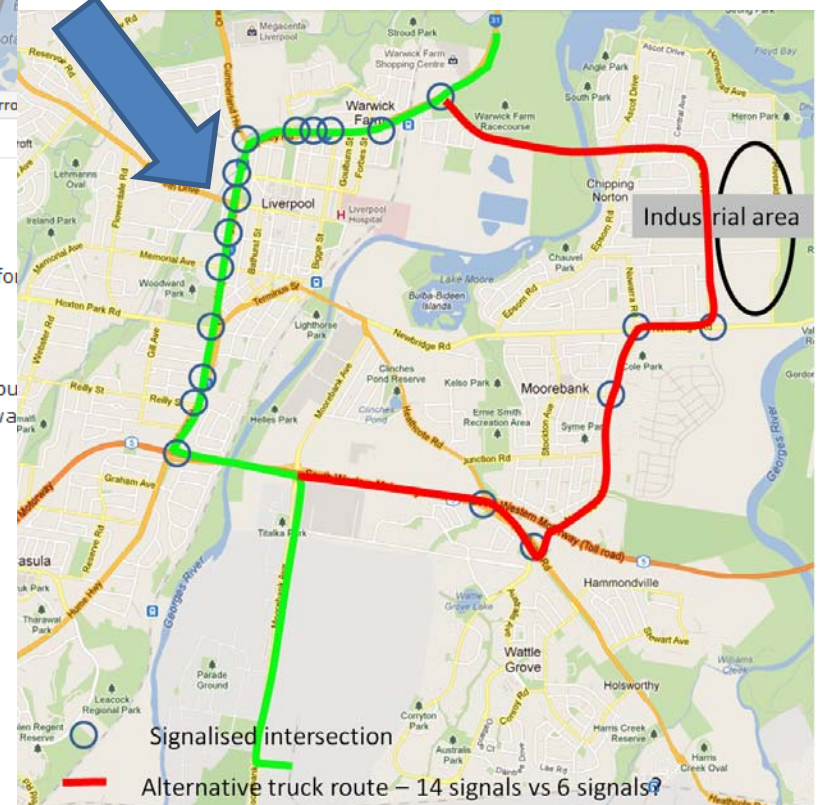
Topics: accidents---other, sydney-2000

More stories from New South Wales



MAP: Sydney 2000

# Hume Highway at Liverpool - Worst Spot for Car Crashes



## SIMTA will add 27% of their traffic to this.

## Revealed: Sydney's five worst accident hot spots

- Henry Budd, *Commuter Reporter*
- *The Daily Telegraph*
- August 22, 2012 7:43AM



Blackspot ... The scene where a truck carrying a shipping container tipped over and crushed a car killing the driver at the corner of the Hume Highway and Cumberland Highway at Liverpool in southwest Sydney in June. Picture: Brad Hunter *Source: The Daily Telegraph*

**ONE driver is crashing every 12 hours at Sydney's five worst accident hot spots, new figures reveal.**

The Hume Highway in [Liverpool](#) has been named as [Sydney's](#) most notorious black spot with at least 183 crashes recorded in the the 12 months to July 2012, according to claims to lodge with AAMI Insurance.

[Pennant Hills](#) Rd in Pennant Hills was the next most dangerous strip of bitumen with 156 crashes.

Sydney's worst roads were rounded out by The Princes Highway, [Rockdale](#), with 135 crashes; the M4 Motorway, [Silverwater](#) with 120 bingles, and Epping Road in [Macquarie Park](#) with 91 accidents.

Across the five worst roads on average there is a crash every 12 hours.

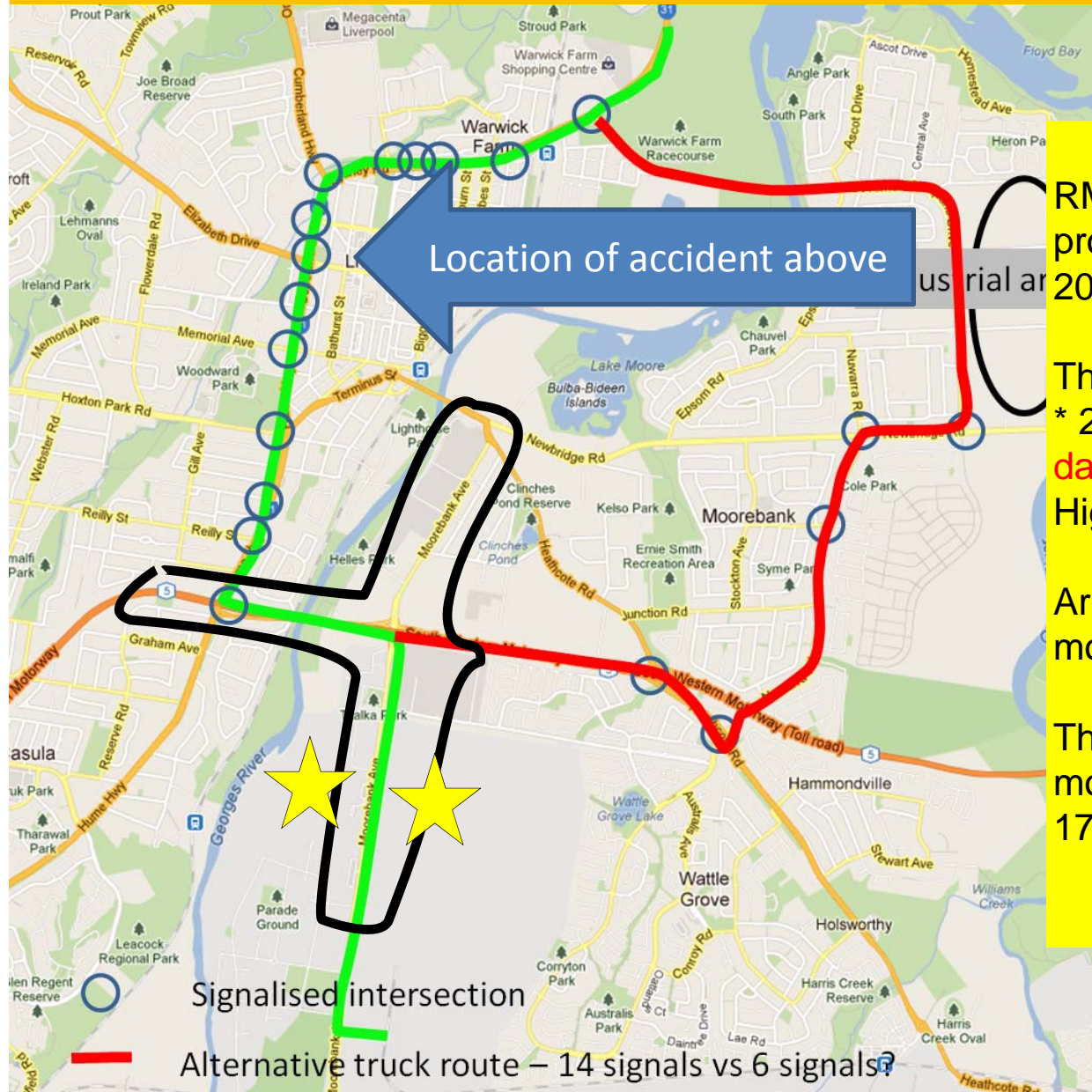
AAMI spokesperson Reuben Aitchison said all the roads were busy and had relatively high speed limits meaning only a small lapse in concentration could lead to an accident.

The news that this section of road was a black spot is not news to us.

Need for infrastructure upgrades

**This indicates  
that traffic  
conditions are  
less than ideal.**

# One truck every 15 seconds 24 hours per day on the worst accident hot spot in Sydney.



RMS indicated that the SIMTA proposal should have modelled for 20,700 trucks per day.

That implies adding an additional 27% \* 20,700 = **5,600 truck movements per day** at this section of the Hume Highway.

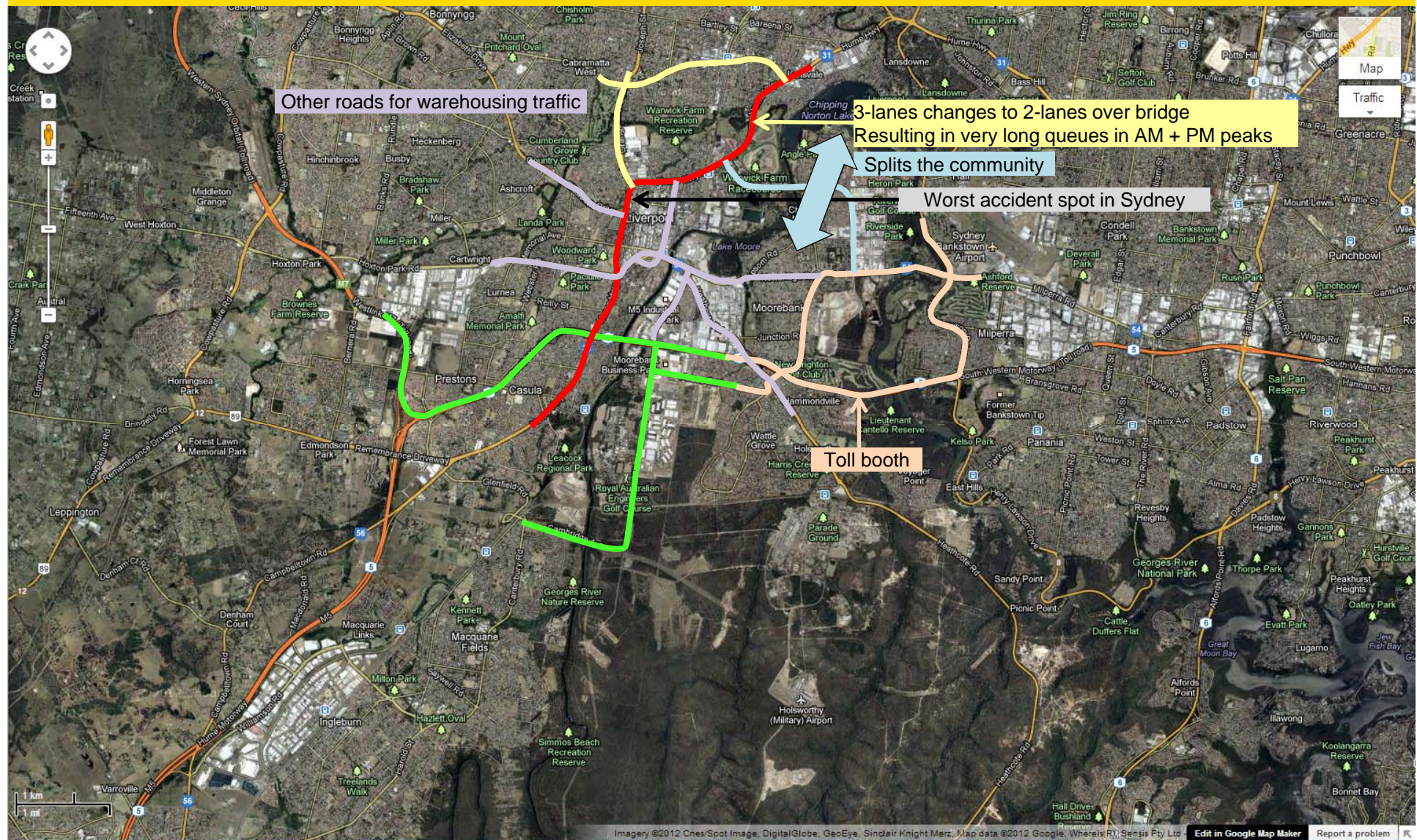
Are you surprised that SIMTA did not model this?

The Federal Intermodal has allocated money to up grade Moorebank Av – in 17 or 18 years time

identification of required road and rail infrastructure upgrades within proximity of the site, including the M5 and M7 motorways and Cambridge Avenue;

Director General's Requirements for Moorebank Intermodal Terminal (SSD - 5066)

Extremely limited for such a large development



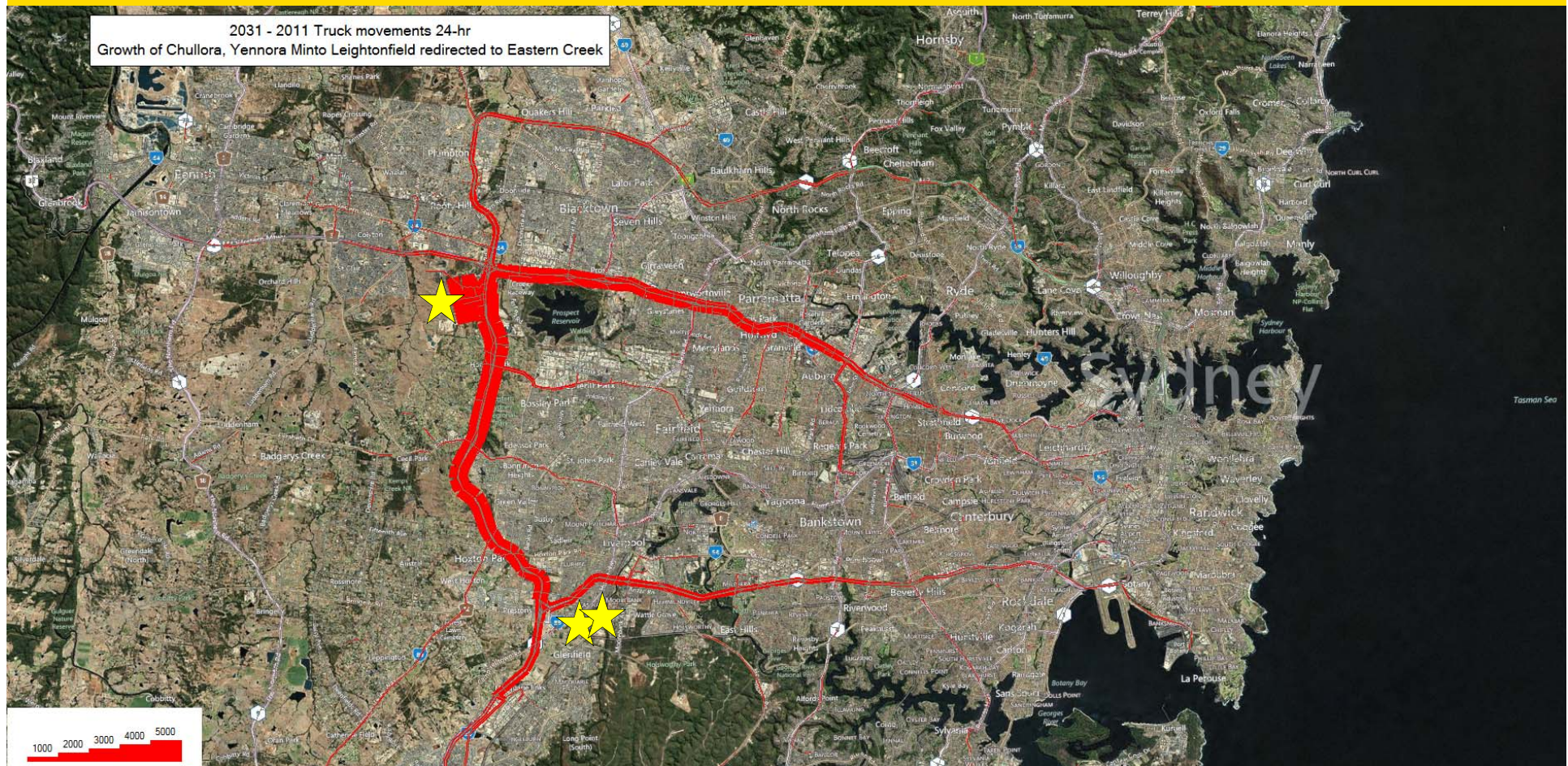
# The Hume Highway is a Federal Highway that circumnavigates the Liverpool CBD



**M7 and M4 has more capacity unlike the M5**

**The Horsley Drive is not a Federal Highway that  
circumnavigates a CBD**

Large median treatment built for trucks with fewer traffic lights



# Who Pays for Hume Highway Upgrade?

\$

\$

\$



**If the cost is not recognised  
before the project begins  
then it is most likely that  
Liverpool will be given a  
cheaper patch up which will  
not be sufficient.**



**In a Formal Capacity  
the Traffic is Already  
Level of Service F**

## Level of Service

These pictures come from the US Highway Capacity Manual.

Many Road Authorities all over the world have adopted the same concept, but have slightly different variations between the definitions of the 6 Levels of Service.

Note that a different set of definitions exists for the LoS for Intersections.



Illustration 3-5. LOS A.



Illustration 3-8. LOS D.

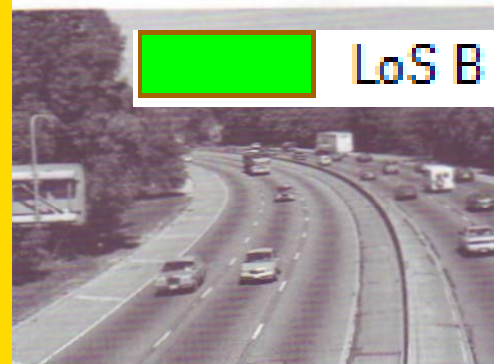


Illustration 3-6. LOS B.

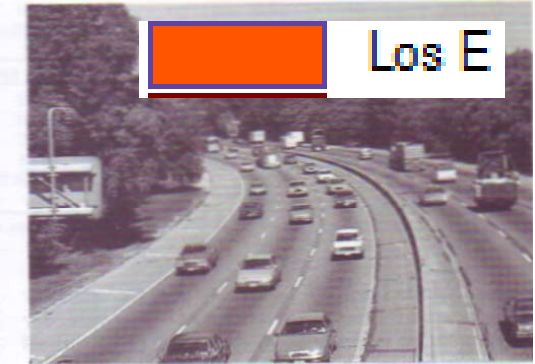


Illustration 3-9. LOS E.

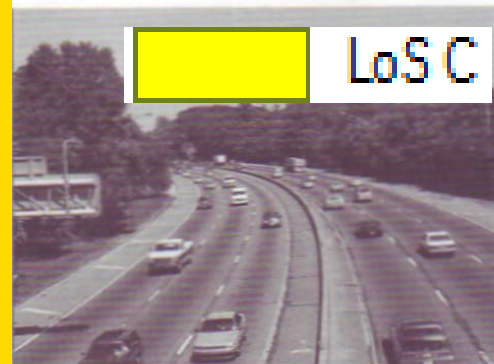


Illustration 3-7. LOS C.



Illustration 3-10. LOS F.

# Level of Service F

Newbridge Rd LoS F. Wednesday 18<sup>th</sup> April 8:20 am



Most road organisations are concerned when the Level of Service is D or above.

There is the issue of 'peak within the peak'. Congestion for a 'short time' is acceptable.

**For example:** 75 teachers running to their cars after the bell rings. This will cause congestion in the car park.

When road is at 95% capacity, even adding 1% more traffic will cause a lot of delay to everyone on the road.

And it will also take a long time to clear.

The important properties to note are:

- (a) The delay/flow characteristic is extremely non-linear and in all cases the delay tends to infinity as the traffic intensity  $\rho$  approaches unity. This produces a powerful stabilizing force on all traffic operations.

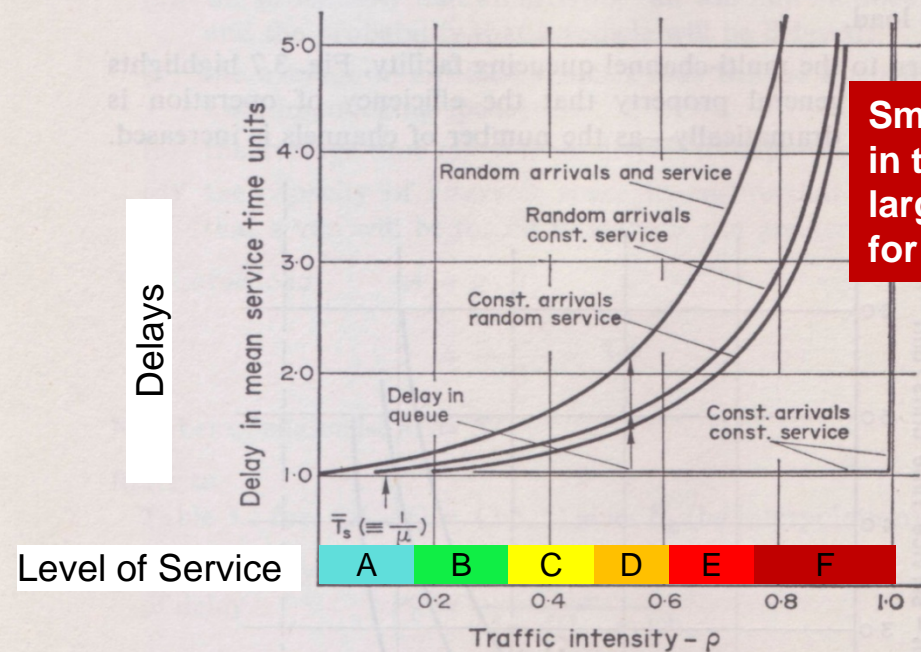


FIG. 3.6

Road authorities start to worry at Level D

- (b) For low flows ( $\rho \rightarrow 0$ ) the delay approaches the value of the average service time.
- (c) Reducing the variability of the service operation or the arrival pattern reduces the delay significantly—especially at the larger values of  $\rho$ . In a general kind of way reduction in the variability of the service operation is synonymous with “good” design of the traffic element, e.g. bus entrances, ship holds and wharf equipment; greater uniformity in the arrival headways infers

# Level of Service F

2031 is not correct according to the auditors it is actually 2011 base calculations plus SIMTA traffic

Halcrow page 13 and 14 Appendix A states

2. Halcrow's traffic and transport report prepared for the proposed M5 West Widening Project indicates LOS F at Moorebank Ave Heathcote Road for 2010.

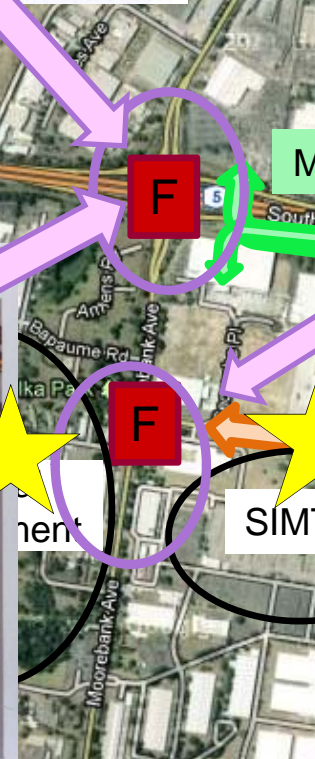
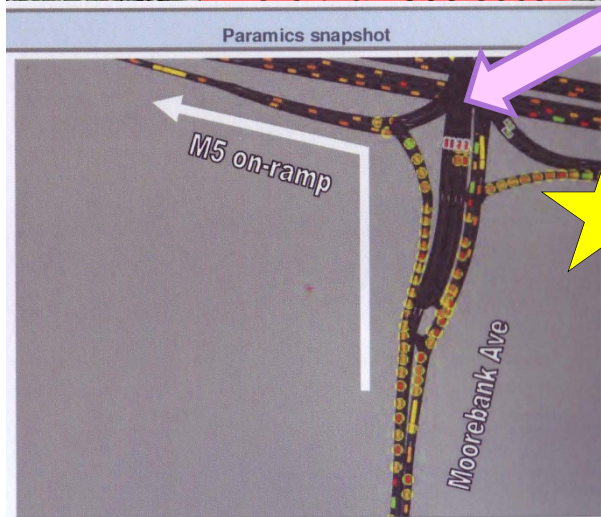
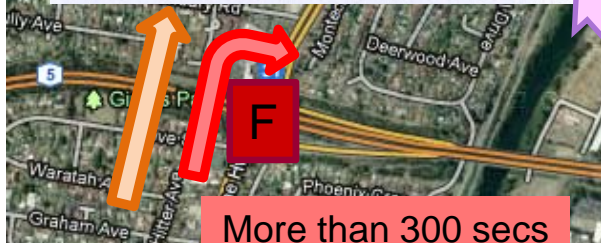
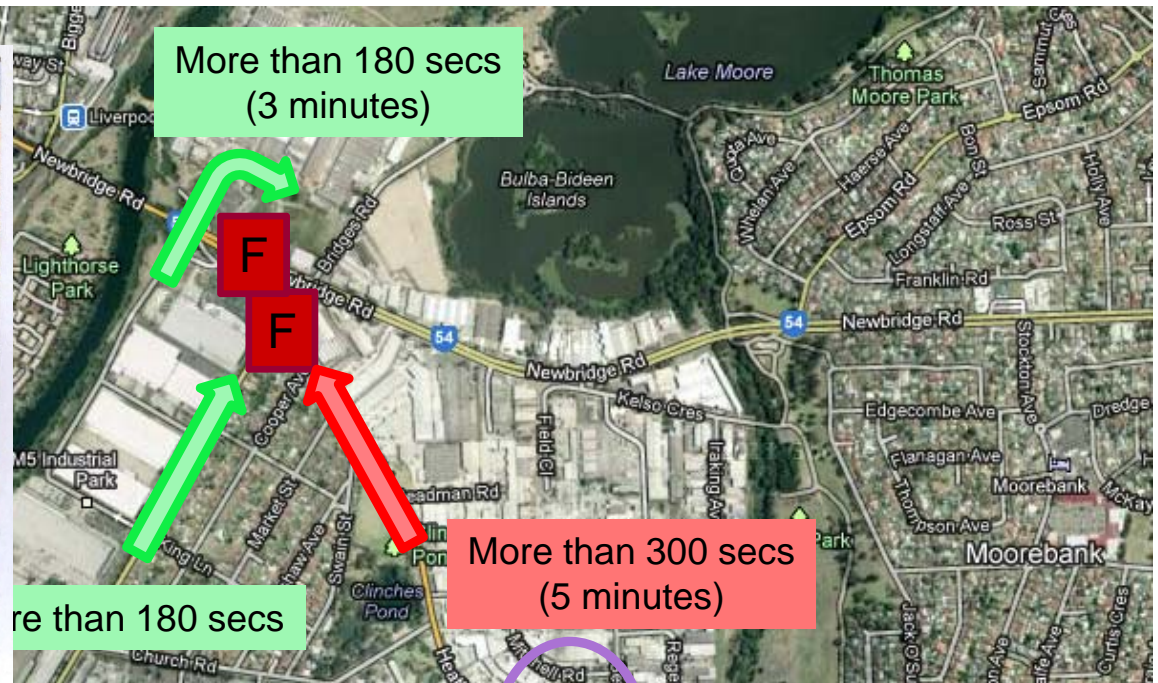
Moorebank Intermodal Terminal Facility (MITF)—Traffic and Transport, page 108

Table 7-7 Level of Service Summary PM Peak (2031 Future Base Case with SIMTA)

Model :2031 Base PM					
Intersection	Approach	Average Delay	LoS (Delay)	Average Delay	LoS
Moorebank Avenue-Anzac Road	North	98	F	127	F
	East	205	F		
	South	128	F		
	North - Slip Lane	2	A		
M5 Motorway-Moorebank Avenue	North - Right Turn	98	F	95	F
	North - Through	64	E		
	East	23	B		
	South - Right Turn	58	E		
	South - Through	47	D		
	West	122	F		
	North - Slip Lane	24	B		
	East - Slip Lane	183	F		
M5 Motorway-Hume Highway	South - Slip Lane	148	F	135	F
	North	68	E		
	East - Right Turn	78	F		
	South - Right Turn	>300	F		
	South - Through	214	F		
	East - Left Turn	59	E		
Moorebank Avenue-Heathcote Road	North - Slip Lane	72	F	161	F
	North	15	B		
	East	>300	F		
	South - Right Turn	128	F		
Moorebank Avenue-Newbridge Road	South - Through	180	F	120	F
	East - Through	142	F		
	East - Left Turn	137	F		
	South - Right Turn	106	F		
	South - Left Turn	18	B		
	West - Right Turn	188	F		
	West - Through	86	F		

Paramics Model Code: 2031 PM\_TZ022\_Stg2\_RevD

Link: F:\AA003210\Calculations\Traffic and Modelling\_POST DGR\Modelling\Paramics\1- Hyder's Paramics\3-2031 Stg2\2031 PM\_TZ022\_Stg2\2031 PM\_TZ022\_Stg2\_RevD



**SIMTA says**

**There are forecast  
Capacity Issues**

# SIMTA states There are Forecast Capacity Issues

## Future looks bad

**Transport and Access** – the assessment has demonstrated that there is a clear benefit arising from the proposal with regard to its strategic contribution to the development of the intermodal network and the increased share of container freight being moved by rail.

There are forecast capacity issues for the local and regional road network. however, it has been demonstrated that these are irrespective of whether or not the SIMTA proposal proceeds.

**Traffic is going to be bad.**

**We may as well contribute to it, because it is not going to matter much.**

# Liverpool Council Requests for Upgrades

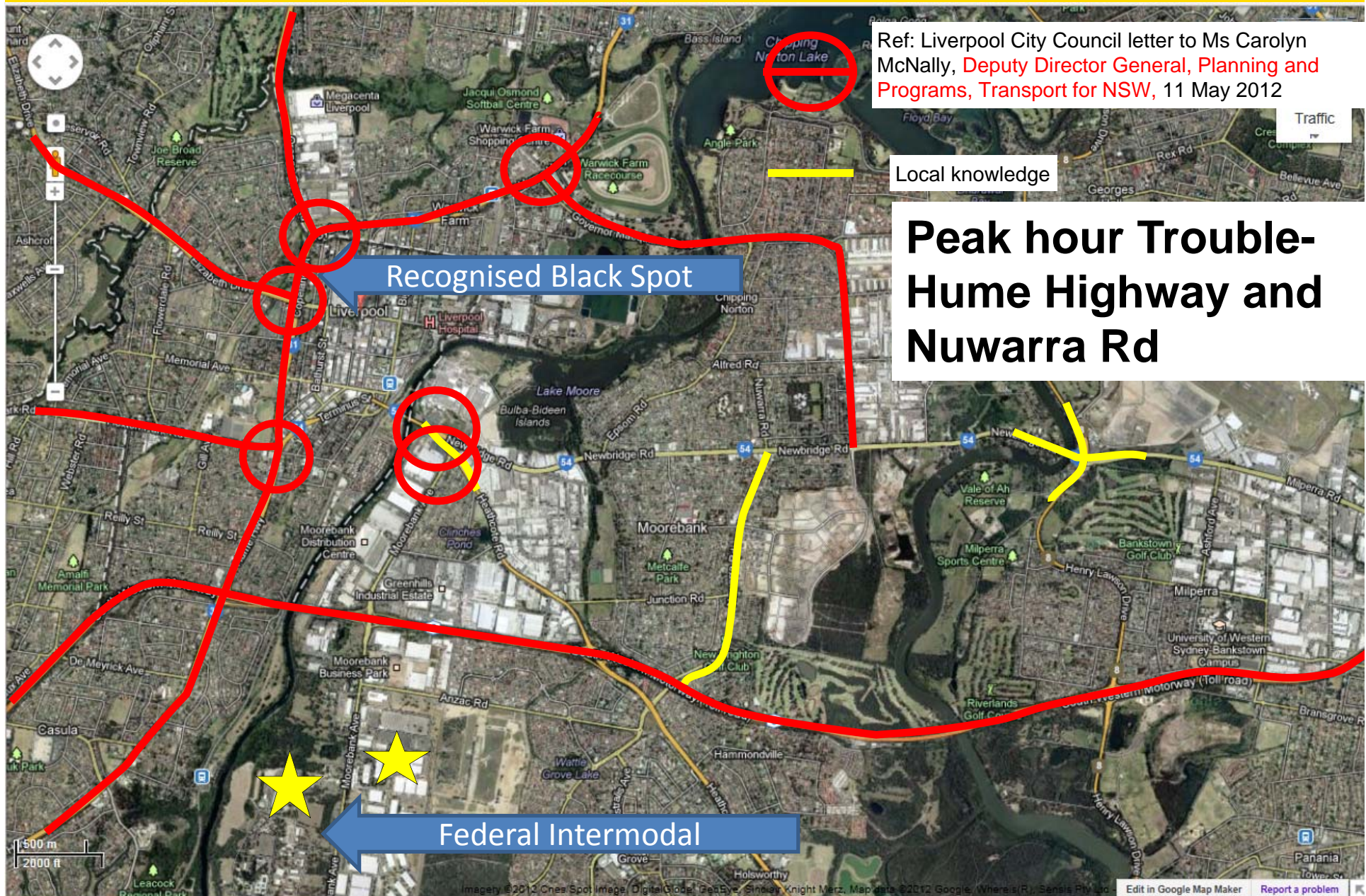
Ref: Liverpool City Council letter to Ms Carolyn McNally, Deputy Director General, Planning and Programs, Transport for NSW, 11 May 2012

Local knowledge

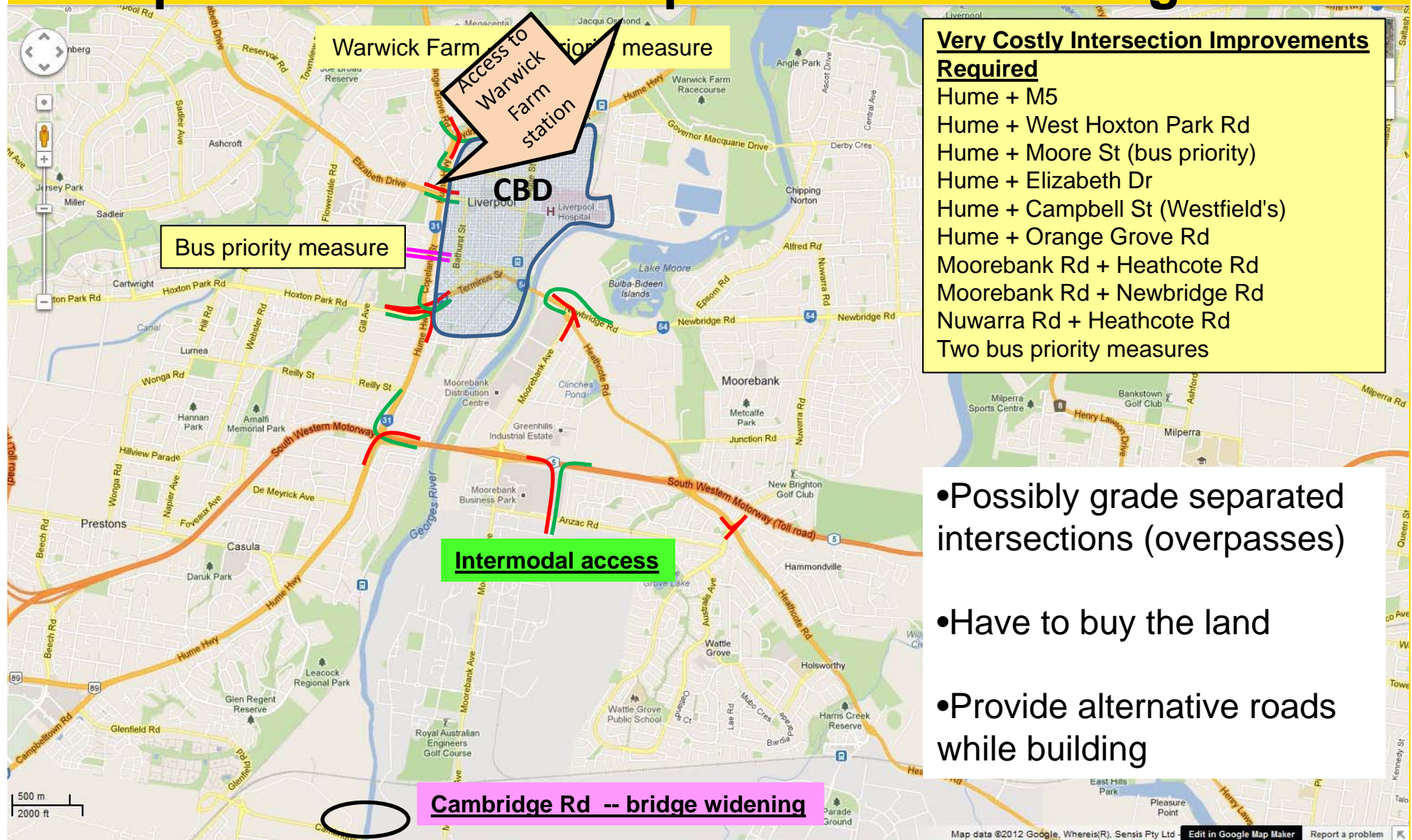
Recognised Black Spot

**Peak hour Trouble-  
Hume Highway and  
Nuwarra Rd**

Federal Intermodal



# Our Modelling indicates that Very Costly Intersection Improvements are Required with normal growth



- Possibly grade separated intersections (overpasses)
- Have to buy the land
- Provide alternative roads while building

## CASE STUDY 13: SUPPORTING THE DEVELOPMENT OF THE MOOREBANK INTERMODAL PRECINCT

The Moorebank precinct has been identified by the Commonwealth and NSW Governments as a key strategic location to increase intermodal capacity. Two intermodal terminals are planned in the precinct; the Moorebank Intermodal Terminal (MIT) has been proposed by the Commonwealth Government for the western side of the precinct, and a privately funded Sydney Intermodal Terminal Alliance (SIMTA) has been proposed for the eastern side. Once complete, these two IMTs are expected to result in up to two million TEU of intermodal terminal capacity.

TfNSW expect the development of these two intermodal terminals in the Moorebank precinct to place significant strain on the surrounding local road network. While not all effects of terminal developments have been identified at this time, initial analysis suggests the following impacts to the local road network:

- Travel demand on the section of the M5 Motorway between the Hume Highway at Casula and Moorebank Ave is expected to exceed capacity as early as 2016.
- The absence of west facing ramps from the M5 to the Hume Highway results in a significant number of vehicles using Moorebank Avenue to access the Liverpool CBD.
- By 2026 growth in background traffic will result in peak spreading and traffic conditions similar to the existing peak period in the Liverpool area and on the M5, persisting for most of the day.
- Key intersections providing access to the Moorebank intermodal precinct will exceed capacity with volumes, especially of turning vehicles, resulting in extensive delays, with queuing sufficient to disrupt through movement.

To support the development of the Moorebank intermodal terminals and meet the challenges posed by impact on the local road network, TfNSW is seeking to provide road network upgrades. The specific goals of these upgrades include:

- Providing additional capacity and traffic reliability on key routes accessing the precinct.
- Ensuring full access to the precinct for High Productivity Vehicles (HPV), including Higher Mass Limit (HML) vehicles.
- Managing the needs of the precinct in terms of road access while addressing negative externalities for the surrounding community and environment.

TfNSW has prepared a Nation Building 2 submission to undertake modelling and economic analysis to determine the optimal road upgrade package to meet the needs of the developed Moorebank intermodal terminal precinct.

### DRAFT NSW FREIGHT AND PORTS STRATEGY

November 2012



NSW Transport for NSW

**Jobs come with  
trucks**

# Liverpool wants jobs

Federal Intermodal Jobs  
1700 jobs

Trucks

RMS 11,290 trucks per day i.e.

**6.6 trucks per  
employee**

People can  
travel by  
public  
transport

Trucks cannot  
travel by public  
transport



Moorebank Project Office is encouraging private industry to take up the 1,250 ha of employment land for warehousing to feed the Moorebank Project Office!!

Warehousing is 1/2 to 1/3 of normal industrial land job density.

**Moorebank**  
**Intermodals do not**  
**take 6,000 trucks off**  
**the M5**

# Federal claims that 3,300 and SIMTA 2,700 trucks/day will be taken off the M5 between Moorebank and Port Botany

http://www.finance.gov.au/property/property/moorebank-intermodal-freight-termi... Moorebank Intermodal Ter...

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Australian Government  
Department of Finance and Deregulation

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- Investment Funds
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  - Land Acquisition
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  - Asset Sales
  - Government Business Enterprises (GBEs)
  - Property and Construction
    - Moorebank Intermodal Terminal Project
- Advertising - Campaign and Non-Campaign

Home >> Land, Property and Asset Management >> Moorebank Intermodal Terminal Project

## Moorebank Intermodal Terminal Project

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 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.
- 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 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.

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.

### Background

In May 2010 the Australian Government tasked the Department of Finance and Deregulation to conduct a Feasibility Study (the Study) into the potential development of an intermodal terminal (IMT) at Moorebank in south western Sydney. The Study, comprising the development of a detailed business case, concept plan and environmental planning approval process, has been assisted by a group of advisers led by KPMG. The Study includes a detailed examination of economic, financial, social, environmental and technical issues.

The corporate advisory firm, Greenhill Caliburn Pty Ltd, confirmed that the recommendations of the detailed business case will optimise early private sector involvement and investment through an open and transparent process, whilst ensuring that the Commonwealth's objectives are met to the maximum extent possible; and the Commonwealth site is the better option than the adjacent private sector site due to its closer proximity to connecting infrastructure and capacity for full interstate service delivery.

- [Greenhill Caliburn - Peer Review Phase 1 Report](#) [584 KB]
- [Greenhill Caliburn - Peer Review Phase 1 Report](#) [1.34 MB]

Search

Go

- finance.gov.au
- Australian Government

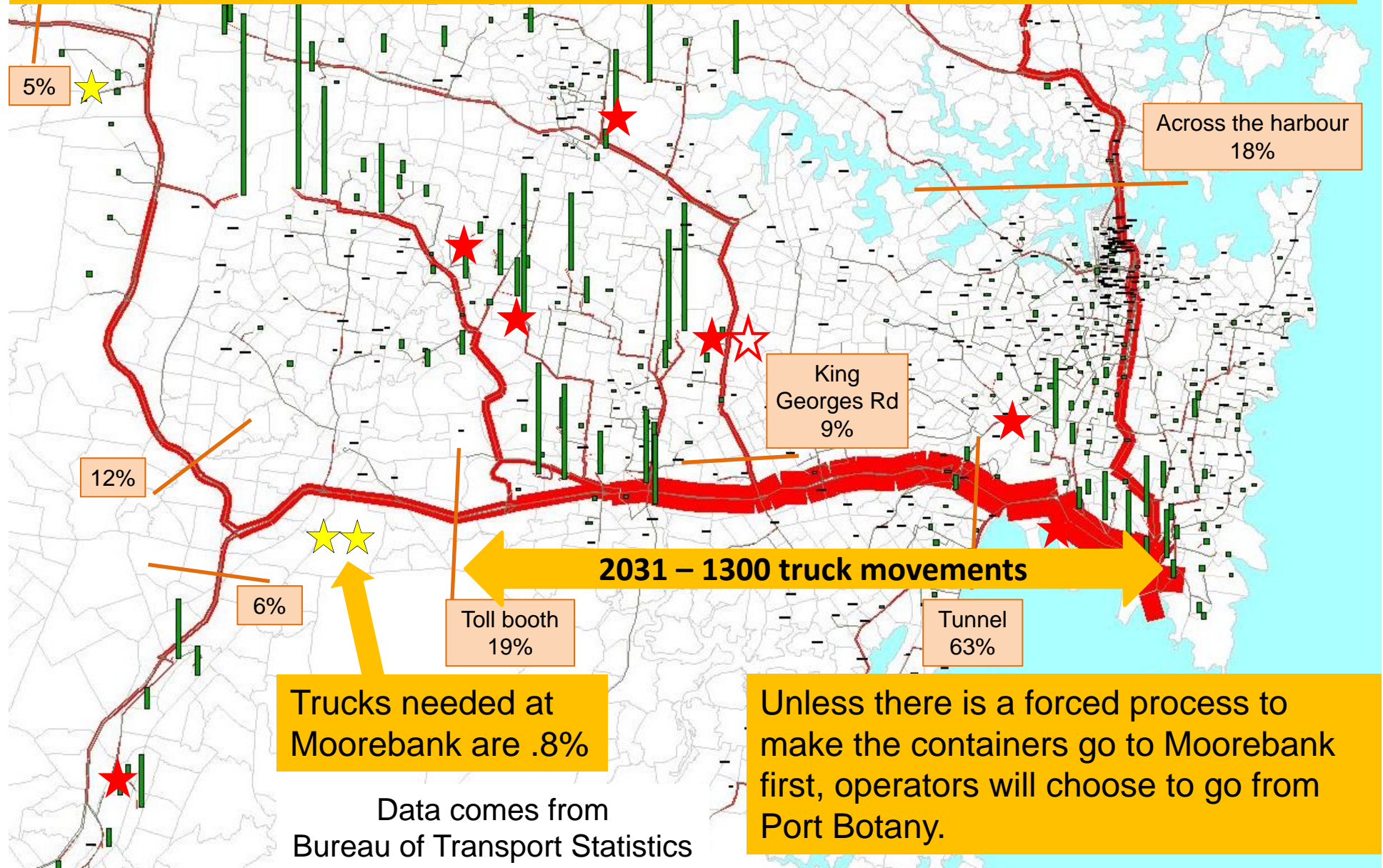
Advanced Search >>

### Other Languages

- عربي - Arabic
- 中文 - Chinese(Simplified)
- Hrvatski - Croatian
- Filipino - Filipino
- Ελληνικά - Greek
- हिन्दी - Hindi
- Italiano - Italian
- ខ្មែរ - Khmer
- Македонски - Macedonian
- Samoan - Samoan
- Српски - Serbian
- Español - Spanish
- Tiếng việt - Vietnamese
- Türkçe - Turkish

125%

# Very few future trucks need to come to Moorebank (certainly not 6,000)





# TRANSPORT MODELLING

This information is incorrect!

No increase in traffic congestion on local roads

No noticeable noise consideration impacts for residents

Reduction of heavy vehicle movements between Port Botany and Moorebank by up to 2,700 movements per day

Create jobs 2,840 permanent + temporary construction jobs



Community News Update December 2011

## Dear Resident,

I am writing to update you about Sydney Intermodal Terminal Alliance's (SIMTA's) proposed intermodal terminal facility at Moorebank.

In line with our commitment, we are lodging the referral of our proposal to the Federal Government under the Environment Protection and Biodiversity Conservation Act 1999. The EPBC Act is Federal legislation that relates to the environment, Commonwealth heritage places and development on Commonwealth land.

Following lodgement, the referral and supporting technical studies will be available for viewing on the Federal Government website at [www.environment.gov.au/epbc](http://www.environment.gov.au/epbc)

A team of experts, engaged by SIMTA, have completed a range of studies assessing how the SIMTA proposal affects the local community and Sydney more broadly.

In short, these studies have found that there will be:

- » No increase in traffic congestion on local roads
- » No decrease in overall air quality
- » No noticeable noise or vibration impacts for residents
- » Minimal light spill from the site.

The studies have also shown SIMTA's proposal will:

- » Reduce heavy vehicle movements between Port Botany and Moorebank by up to 2,700 movements per day
- » Reduce greenhouse gas emissions by up to 40,000 tonnes of CO<sub>2</sub> per year – equivalent to taking more than 10,000 cars off Sydney roads
- » Create nearly 5,000 jobs – 2,840 during the operation of the intermodal terminal and 2,040 during construction.

The Federal Government is proposing a facility on Defence land west of Moorebank Avenue later in the decade. We will work with the Government to achieve a strategic, whole-of-precinct approach that allows the best solution across both sites.

SIMTA will lodge its Environmental Assessment and Concept Plan with the NSW Department of Planning and Infrastructure (DoP&I) in January 2012. The DoP&I will then place the application on public exhibition, giving the community an opportunity to comment on the proposal. SIMTA's Federal environmental referral will run alongside this process.

Our Community Information Centre will recommence regular opening times in 2012 when the Environmental Assessment and Concept Plan have been lodged.

I encourage you to use these opportunities to get information about the proposal. If you are unable to attend the Community Information Centre in person, please contact us by:

- » Visiting our website, [www.simta.com.au](http://www.simta.com.au)
- » Calling our dedicated information line, **1800 986 465**
- » Sending an email to [consulting@elton.com.au](mailto:consulting@elton.com.au)

We look forward to working with the community and answering your questions about our proposal.

Yours sincerely,

**Stephen Bull**  
General Manager, Development –  
Commercial Property, Stockland  
On behalf of SIMTA

## SIMTA Information Centre *OPEN BY APPOINTMENT*

The Community Information Centre remains open by appointment.

**Where:** 7 Secant Street, Liverpool

The centre will reopen at regular times when the Environmental Assessment and Concept Plan are lodged with the NSW Department of Planning and Infrastructure in the New Year.

- **Traffic**
- **Pollution**
- **Economics**
- **What I want to see**

**NATIONAL ENVIRONMENT PROTECTION  
(AMBIENT AIR QUALITY) MEASURE**

**NEPM** National Environment Protection Measure  
**AAQ** Ambient Air Quality

**NEW SOUTH WALES  
ANNUAL COMPLIANCE REPORT  
2009**



Environment,  
Climate Change  
& Water

Liverpool monitoring station does **not** comply with all siting and exposure criteria

Clear sky angle < 120°

Trees have grown since establishing stations

### Station siting and exposure

All stations within the network meet all of the Ambient Air Quality NEPM siting and exposure criteria with the exceptions of Earlwood, Liverpool, Rozelle, Tamworth, and Wagga Wagga (see Table 2 for further details).

**Table 2: Stations not complying with all siting and exposure criteria**

Station	Siting criteria not met	Comments
Earlwood	Clear sky angle <120°. Less than 20m from trees.	Trees have grown since establishment of station.
Liverpool	Clear sky angle <120°.	Trees have grown since establishment of station.
Rozelle	Clear sky angle <120°. Less than 20m from trees.	Trees have grown since establishment of station.
Tamworth	Less than 20m from trees.	Best location in urban area specifically targeted for monitoring.
Wagga Wagga	Less than 20m from trees.	Street trees within about 15 m of station

## PM<sub>10</sub> was exceeded every year since 2000 (24 hour averages)

Max = 50



### Trend analysis

Table 106: Maximum 24-hour average concentrations for PM<sub>10</sub> (µg/m<sup>3</sup>)

Region/ Performance monitoring Station	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Sydney</b>										
Blacktown/ Prospect	34.9	127.4	117.7	187.8	44.1			46.3*	41.8*	1680.3*
Bringelly	37.4	98.4	118.6	275.1	62.5	54.5	72.2	51.0	62.7	1683.9
Chullora				213.7	55.8	58.7	66.1	66.5	44.3	1474.7
Liverpool	66.0	63.2	126.3	283.3	62.1	55.5	75.2	53.1	53.8	1579.8
Macarthur					60.6	53.2	92.3	53.1	65.5	1146.3
Oakdale					41.3	42.3	56.5	49.2	68.2	1528.3
Richmond	43.1	120.5	127.3	196.4	46.6	47.4	63.1	43.0	39.0	1637.3
Rozelle				38.1	54.1	46.8	50.3	54.4	43.1	1562.8
<b>Illawarra</b>										
Albion Park Sth							61.4	53.8	96.1	1359.6
Kembla Grange					58.8	60.5	86.0	59.2	100.8	1174.0
Wollongong	57.9	68.1	75.6	280.5	49.0	56.5	63.3	58.5	78.3	1145.4
<b>lower Hunter</b>										
Beresfield	55.7	82.0	165.6	87.0	53.1	53.1	51.9	64.0	59.9	1999.0
Newcastle					46.7	48.3	51.2	58.1	54.4	2426.8
<b>Regional</b>										
Albury		29.8	86.2	940.2	56.0	56.9	213.0	212.8	124.8	249.7
Bathurst	34.9	35.8	256.7	622.3	68.5	44.9	59.6	162.8	63.0	2114.4
Tamworth	21.5	32.6	197.1	241.6	56.2	88.7	47.8	48.8	100.4	1791.4
Wagga Wagga		69.6	193.2	970.0	109.0	161.9	188.3	110.3	294.9	297.4

AAQ NEPM Standard – 50 µg/m<sup>3</sup> (24-hour average)

Bold font indicates values that exceed the AAQ NEPM standard

Even with a dodgy  
monitoring station

**NEPM** National Environment  
Protection Measure

## PM<sub>2.5</sub> was exceeded in 9 out of the last 10 years (24 hour averages)

### Trend data

Annual averages and annual maximum 24-hour averages for all stations are given below.

Table 125: Maximum 24-hour average concentrations for PM<sub>2.5</sub> (µg/m<sup>3</sup>) – continuous TEOM method

Region/ Performance monitoring Station	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Sydney										
Chullora				81.2	23.5	25.4	32.8	20.5	19.5	183.2
Earlwood	21.4	76.4	59.5	25.2	20.1	26.8	20.0	19.8	18.3	186.7
Liverpool	42.7	112.2	78.7	45.9	38.9	30.8	48.1	23.0	32.1	268.2
Richmond	13.6	95.5	95.4	57.2	23.3	22.7	31.6	21.1	17.7	192.3
Illawarra										
Warrawong	30.8	19.8	83.5	152.6	23.6	24.0	15.0			
Wollongong	28.7	46.7	86.2	106.0	22.6	22.0	26.6	22.5	14.7	241.0
lower Hunter										
Beresfield	31.9	62.5	47.0	42.8	27.8	19.5	24.9	23.0	16.9	230.9
WallSEND	59.1	51.7	55.6	30.2	23.5	18.0	25.6	18.0	22.7	415.6

Max = 25

Even with a dodgy  
monitoring station

AAQ NEPM advisory reporting standard - 25µg/m<sup>3</sup> (24-hour average)

Bold font indicates values in excess of the AAQ NEPM advisory reporting standard

\* Please note that all PM<sub>2.5</sub> TEOM data-uses USEPA factors of A=0 and B=1.00

### PM<sub>2.5</sub> 24 hour average

NEPM Annual Compliance reports prior to 2009 included 24 hour daily average calculations for PM<sub>2.5</sub> using hours 0 to 23. Daily averages are now calculated using hours 1 to 24 as detailed in the NEPM

Final version – Revised 30<sup>th</sup> Nov 2010

81 of 95

NEPM National Environment  
Protection Measure

## Diesel Exhaust Emissions contain Carcinogens e.g. (PM<sub>2.5</sub>), benzene and polycyclic aromatic hydrocarbons



elements of the environment. In practice, particles larger than 30 to 50  $\mu\text{m}$  settle out of the atmosphere too quickly to be regarded as air pollutants but are considered for their impacts on amenity.

The health-based assessment criteria used by NSW OEH (**DEC, 2005**) have, to a large extent, been developed by reference to epidemiological studies undertaken in urban areas with large populations where the primary pollutants are the products of combustion. This means that, in contrast to dust of crustal<sup>2</sup> origin, the particulate matter would be composed of smaller particles and would generally contain acidic and carcinogenic substances that are associated with combustion. This is particularly significant for diesel exhaust emissions which are predominantly comprised of fine (PM<sub>2.5</sub>) and ultra-fine particulate matter (< PM<sub>1</sub>) and can contain carcinogenic compounds such as benzene and polycyclic aromatic hydrocarbons (PAHs).

Appendix J: Air Quality Impact Assessment, SIMTA, SYDNEY INTERMODAL TERMINAL Alliance, Part 3A Concept Plan Application  
Queensland Environment Pty Ltd trading as **PAEHolmes** ABN 86 127 101 642 -- Page 13

This is particularly significant for **diesel exhaust emissions** which are predominantly comprised of fine (PM<sub>2.5</sub>) and ultra-fine particulate matter (< PM<sub>1</sub>) and can **contain carcinogenic compounds** such as benzene and polycyclic aromatic hydrocarbons (PAHs).

# Carcinogens are Magnitudes higher from Diesel Engines

used in the current assessment as provided by PAE (2011).

However modelling data relating to particulate matter did not specify the size fraction modelled and is assumed to represent PM10.

As such the modelled data provided by PAE(2011) for particulate matter was apportioned to the PM10 and PM2.5 fractions before being used in the current assessment.

**This apportionment requires an understanding of the emissions associated with increased freight transport, including the proportion comprised of fine particles and that of coarse particles.** Page 24 of 85

Within the context of the current assessment, fine particles are likely to be largely comprised of vehicle exhaust emissions. According to Morawska (2002), particulate matter emitted from exhausts “*are mostly submicrometre agglomerates of solid phase carbonaceous material ranging in size from 30 to 500nm and residing mainly in the accumulation mode*”. Vehicle exhausts are a major emitter of fine particles present in traffic influenced urban environments with the majority of the **contribution from diesel engines that is two to three magnitudes higher than petrol vehicles** (Morawska et al., 2005; Ristovski et al., 2005; Ristovski et al., 2006, Morawska 2002) Page 24 of 85

# **Air Pollution Economics**

## **Health Costs of Air Pollution in the Greater Sydney Metropolitan Region**

---



Department of  
Environment and  
Conservation (NSW)

**Only PM<sub>10</sub> – no PM<sub>2.5</sub> which causes **cancer** is not required to be studied by the director general.**

**Table S.1: Health cost of air pollution in the GMR**

Assumptions	Estimated annual health cost of 2000–2002 mean ambient pollution levels		
	Low	High	Midpoint
Cost based on PM <sub>10</sub> indicator with threshold of 7.5 µg/m <sup>3</sup>	\$1.0 billion	\$8.4 billion	\$4.7 billion
Cost per capita	\$192	\$1,594	\$893
Cost as percentage of gross state product	0.4%	3.4%	1.9%

Notes:

1. Costs are given in year 2003 dollars.
2. Costs primarily reflect long-term mortality, for which a value of statistical life of \$1m to \$2.5m is used.
3. Resident population of GMR for study period estimated at 5.27 million.
4. The range of costs shown in Table S.1 is calculated by multiplying low and high estimates of (a) the statistical likelihood of an adverse health outcome per unit increase in air pollution by (b) the economic cost estimated for each health endpoint.



## Action for Air

2009 Update

Department of  
Environment, Climate Change and Water NSW



The estimated annual health cost (direct and indirect) of current levels of air pollution in the Greater Metropolitan Region is \$4.7 billion, or \$893 per head of population.

Air pollution causes between 640 and 1400 deaths per year in Sydney, between 359 and 784 hospital admissions for respiratory conditions and between 561 and 1206 hospital admissions for cardiovascular conditions.

The Commonwealth Bureau of Transport and Regional Economics estimated that motor traffic pollution alone was responsible for health costs of \$3.3 billion per year in Australian capital cities.

Sydney's share of pollution cost was estimated at \$1.5 billion per year.

**Pollution estimates  
from SIMTA should  
include  
30 X the number of  
Trucks**

Appendix I and J refer to the **busiest hour** being run for 24 hour. **The conservatism in the emissions estimate is purposely intended to account for uncertainty in the operational details for the facility.**

**Pollution modelling should have used 3x the number of trucks**

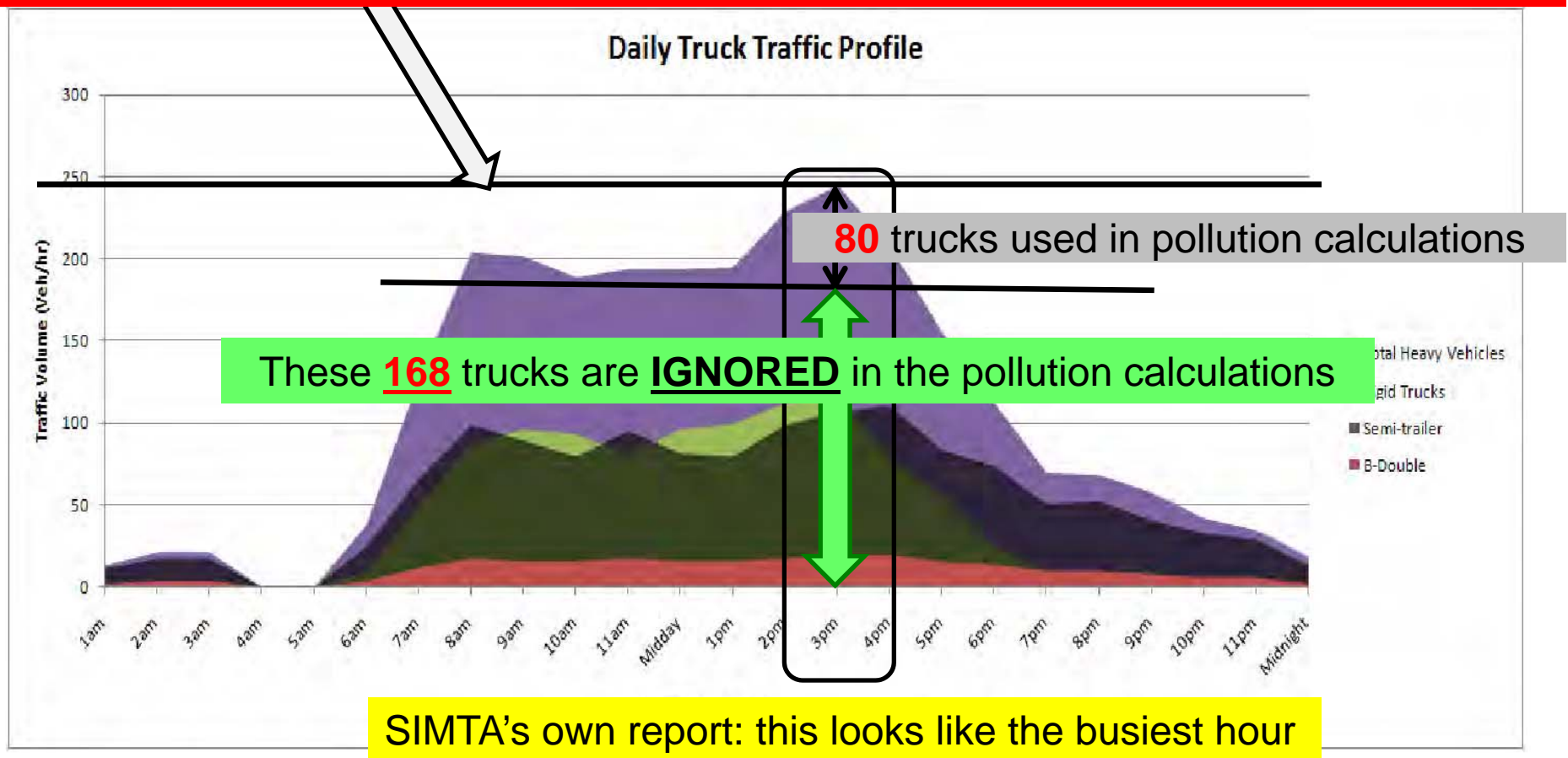


Figure 7-3 SIMTA Daily Truck Generation Profile

# TfNSW says 10 x More Trucks

9

CD12/05199

## *6.5 Truck traffic generation - what the response to submissions should provide*

TfNSW considers that the estimated truck traffic generated from the SIMTA proposal (approximately 2,600 daily truck movements) appears low. TfNSW considers it more likely that an intermodal terminal with 1 million TEU from Port Botany and a 1.0 million TEU rail operation from Inter State will generate approximate 20,700 daily truck movements. This is ten times more than the truck generation estimated for the SIMTA proposal.

The pollution modelling needs to be redone with

- three times the number of trucks to use the SIMTA truck estimates
- ten times the number of SIMTA trucks to use the TfNSW truck predictions
- Calculations for the induced traffic should also be added

• In total the number of trucks should be at minimum **30 x** what is actually used for the pollution modelling.

**Who Pays for  
cancer**

**\$ patients?? \$**

**Cancer costs can  
be hidden for**

**\$**

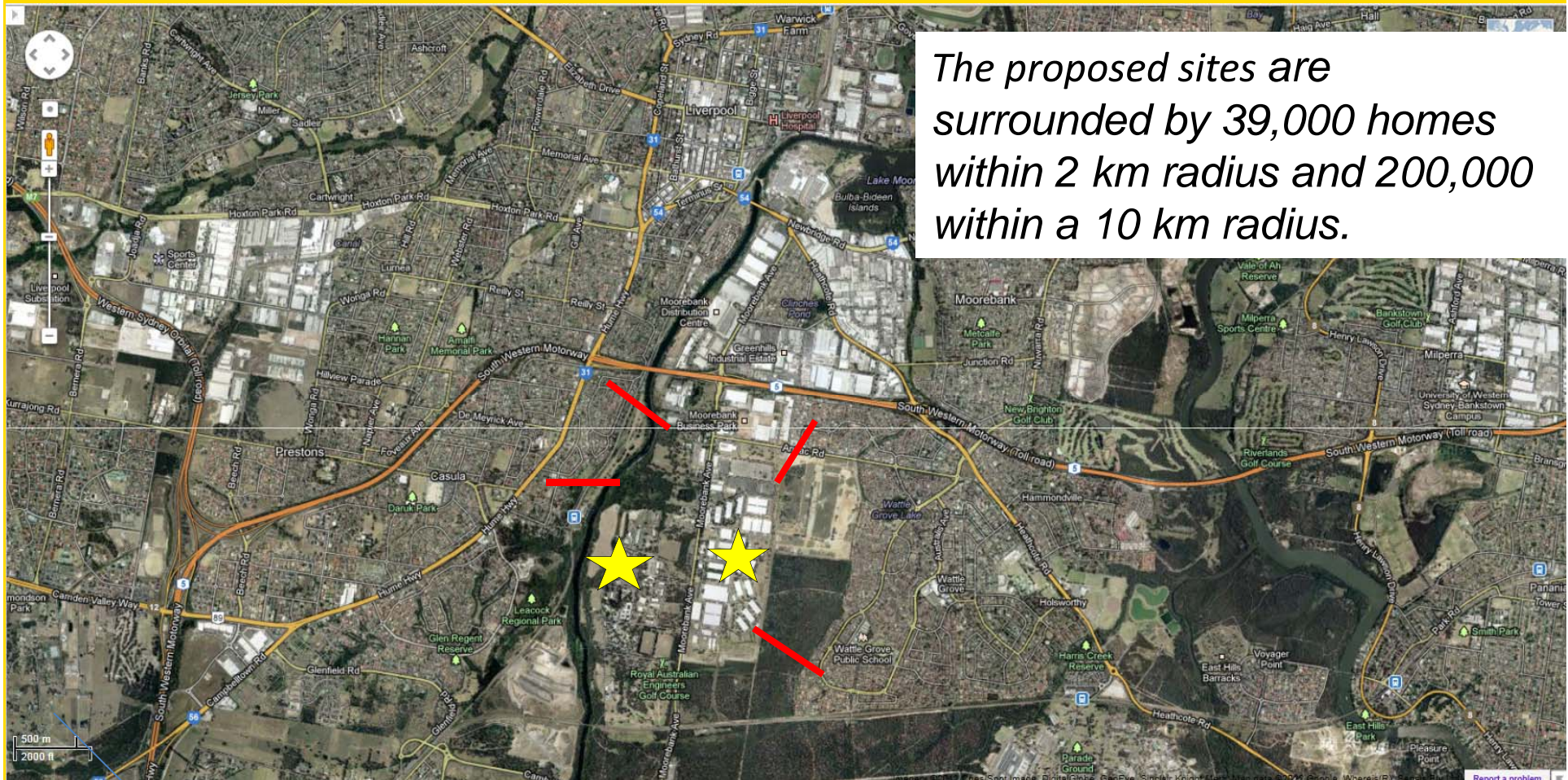
**now.**

**\$**

**\$**

# Moorebank Intermodal Nearest Houses within 500m High density housing on the highways

— 500m



# Eastern Creek Nearest Houses 1500m (every metre further from an intermodal means less cancers)

— 500m

Land has already been set  
aside for development no  
moving of a school of  
Military Engineering



**SIMTA & Government  
should be held  
Accountable  
for costs and deaths**

**Existing available  
data does not  
support Federal  
and SIMTA's  
statements**

Each person will bring 2 truck trips for Intermodal + 4-6 truck trips for warehousing  
 This equals to more pollution, more accidents, more road damage due to truck movements, less reliable truck travelling times in and around Liverpool.

1,700 people being employed in the region.

## Existing available data does not support these statements

IMT at Moorebank would deliver

and social outcomes that are considerate of community views.

- The community would benefit from a reduction in road congestion and road accident costs. For example without the Moorebank IMT from 2020 onwards truck volumes would be 3,300 vehicles per day higher.
- The Moorebank IMT would bring about a reduction in environmental costs associated with road transport – in particular a reduction in noise, greenhouse gas emissions and other air pollution. For example, the Moorebank IMT would save 9,500 tonnes of CO<sub>2</sub>-e greenhouse gases for every 1 million TEU containers that are transported by rail instead of road for IMEX traffic.
- Journey reliability benefits – this social benefit reflects the savings achieved through more reliable road travel times.
- Road damage cost savings – these social benefits measure the cost savings derived from less road damage caused by freight trucks.
- The local community would benefit through the creation of 1,650 full time jobs during Stage 1 and approximately 975 full time jobs during Stage 2 construction of the interstate terminal. The operation of both terminals together with warehousing could see an additional 1,700 people being employed in the region.
- Overall, the total Project benefits over the 30 year evaluation period are valued at approximately \$10 billion in nominal dollars or \$2.3 billion in present value terms.

6. Optimise value for money for the Commonwealth

The proposed procurement approach was designed to achieve value for money. The Project would facilitate the modal shift from road to rail, would further enhance the Commonwealth's investment in rail infrastructure, would assist in reducing road congestion and road accidents and would assist in raising Port

- **Traffic**
- **Pollution**
- **Economics**
- **What I want to  
see**

**Economics  
Doesn't Add  
Up**

ADVISORY

## Department of Finance and Deregulation

Moorebank Intermodal  
Terminal Project

Detailed Business Case

6 February 2012

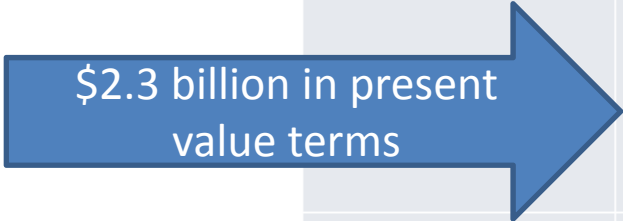
**Deloitte.**

**PARSONS  
BRINCKERHOFF**

**Table 1.30 – Evaluation of the proposed solution against the Commonwealth’s Project objectives**

Objectives	Evaluation
	1,700 people being employed in the region.
5. Achieve sound environmental and social outcomes that are considerate of community views.	<p>The environmental and social benefits that an IMT at Moorebank would deliver are derived from a range of sources:</p> <ul style="list-style-type: none"> <li>• The community would benefit from a reduction in road congestion and road accident costs. For example without the Moorebank IMT from 2020 onwards truck volumes would be 3,300 vehicles per day higher.</li> <li>• The Moorebank IMT would bring about a reduction in environmental costs associated with road transport – in particular a reduction in noise, greenhouse gas emissions and other air pollution. For example, the Moorebank IMT would save 9,500 tonnes of Co2-e greenhouse gases for every 1 million TEU containers that are transported by rail instead of road for IMEX traffic.</li> <li>• Journey reliability benefits – this social benefit reflects the savings achieved through more reliable road travel times.</li> <li>• Road damage cost savings – these social benefits measure the cost savings derived from less road damage caused by freight trucks.</li> <li>• The local community would benefit through the creation of 1,650 full time jobs during Stage 1 and approximately 975 full time jobs during Stage 2 construction of the interstate terminal. The operation of both terminals together with warehousing could see an additional 1,700 people being employed in the region.</li> <li>• Overall, the total Project benefits over the 30 year evaluation period are valued at approximately \$10 billion in nominal dollars or <u>\$2.3 billion in present value terms</u>.</li> </ul>
6. Optimise value for money for the Commonwealth	The proposed procurement approach was designed to achieve value for money. The Project would facilitate the modal shift from road to rail, would further enhance the Commonwealth’s investment in rail infrastructure, would assist in reducing road congestion and road accidents and would assist in raising Port

\$2.3 billion in present value terms



**VERY DECEIVING**

# **Benefits**

**Not \$10 billion but \$2.3  
billion in today's terms**

**Costs to the Taxpayer  
and Liverpool  
Community of  
allowing Moorebank  
Intermodal  
Huge**

## Cost of Disbenefits Who Pays????

- Moving the Army (.9 billion i.e. 900 million)
- Remediation of the land 100 million to 200 million?
- Road infrastructure – to cope with additional traffic - big
  - improving access to the M5
  - Increasing capacity on the M5
  - Increasing capacity on the Hume Highway and other hot spots - Very Costly Intersection Improvements
  - Required - Hume + M5, Hume + West Hoxton Park Rd, Hume + Moore St (bus priority), Hume + Elizabeth Dr, Hume + Campbell St (Westfield's), Hume + Orange Grove Rd, Moorebank Rd + Heathcote Rd, Moorebank Rd + Newbridge Rd, Nuwarra Rd + Heathcote Rd, Two bus priority measures
  - Bridge on Cambridge Ave
- Building the rail spur line \$500 million? (elevated)
- Increased accidents - based on increased truck VKT in Liverpool
  - at Moorebank accessing the M5
  - children crossing busy roads to go to school
  - due to the general increase in traffic movements (for every person killed there are people 'seriously injured', paraplegic or quadriplegic, the costs for these are incalculable)
- Increased travel delay for local travellers
- Inaccessibility to Liverpool CBD - loss of business
- Inaccessibility to hospital and schools
- Increased health care due to increased cancers from pollution
- Environment — Threatened *Persoonia nutans* (Nodding Geebung) and *Grevillea parviflora* subsp. *parviflora* (Small-flower Grevillea)

**A good economic analysis will include these costs as dis-benefits to society we want to see this.**

**Moorebank is  
definitely not the  
cheaper alternative**

**Information Blacked  
Out - we cannot see  
all the economics**

Project Information		Start Date	End Date
Project Name	Project Manager	Start Date	End Date
Project A	John Doe	2023-01-01	2023-03-31
Project B	Jane Smith	2023-02-01	2023-04-30
Project C	Mike Johnson	2023-03-01	2023-05-31
Project D	Sarah Lee	2023-04-01	2023-06-30
Project E	David Kim	2023-05-01	2023-07-31
Project F	Emily White	2023-06-01	2023-08-31
Project G	Chris Brown	2023-07-01	2023-09-30
Project H	Alex Green	2023-08-01	2023-10-31
Project I	Nina Black	2023-09-01	2023-11-30
Project J	Leo Gray	2023-10-01	2023-12-31

### Additional economic analysis

© 2006 The Authors  
Journal compilation © 2006 Blackwell Publishing Ltd

*IMEX only terminal*

© 2006 The Authors  
Journal compilation © 2006 Blackwell Publishing Ltd

## Economic analysis

We have been told  
this information has  
been redacted  
because it is  
commercially  
sensitive.

Surely the people who will have to cope with the traffic and pollution should be able to access this information!!!

*Estimated container, train and truck movements at Moorebank*

2019			
Country	2019	2018	2017
United States	100%	100%	100%
Germany	95%	95%	95%
France	90%	90%	90%
Italy	85%	85%	85%
Spain	80%	80%	80%
Japan	75%	75%	75%
China	70%	70%	70%
India	65%	65%	65%
Brazil	60%	60%	60%
Russia	55%	55%	55%
South Africa	50%	50%	50%
United Kingdom	45%	45%	45%
Canada	40%	40%	40%
Australia	35%	35%	35%
South Korea	30%	30%	30%
Sweden	25%	25%	25%
Netherlands	20%	20%	20%
Belgium	15%	15%	15%
Switzerland	10%	10%	10%
Portugal	5%	5%	5%
Greece	0%	0%	0%

**Table 4.11 – Summary of infrastructure issues and potential constraints**

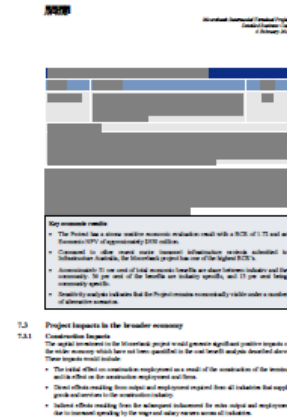
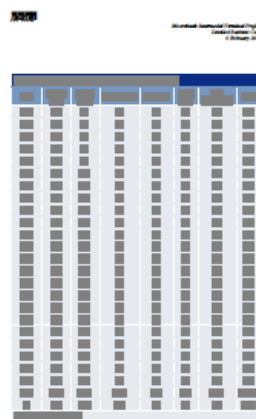
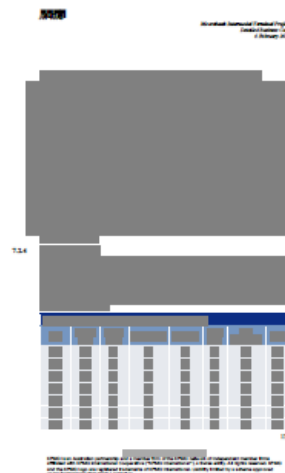
Segment	Issues	Potential constraints
Port and Airport Precinct	<ul style="list-style-type: none"> <li>• M5 East is at capacity at peak times.</li> <li>• Airport traffic growing – Foreshore Drive and General Holmes Drive capacity.</li> <li>• Level crossings on rail line to Enfield.</li> <li>• High density residential development along rail corridor.</li> <li>• Growing number passenger trains on Illawarra Line - through traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• Botany - Enfield line duplication incomplete.</li> <li>• Noise in rail corridor may limit growth.</li> <li>• Road network is constrained.</li> </ul>
Central West and SSFL	<ul style="list-style-type: none"> <li>• High density traffic on SSFL between Sefton Park and Moorebank.</li> <li>• Chullora has short sidings and is near capacity.</li> <li>• Narrow corridor for SSFL limits future expansion possibility.</li> </ul>	<ul style="list-style-type: none"> <li>• SSFL likely to reach capacity between 2021 and 2030.</li> <li>• Limited number of loops to handle 1,800 metre trains.</li> <li>• Ability to physically duplicate SSFL may be problematic.</li> </ul>
Moorebank Precinct	<ul style="list-style-type: none"> <li>• [REDACTED]</li> <li>• [REDACTED]</li> <li>• [REDACTED]</li> <li>• Traffic levels may generate potential requirement for second road access point for trucks.</li> <li>• [REDACTED]</li> </ul>	<ul style="list-style-type: none"> <li>• SSFL between Sefton Park and Moorebank.</li> <li>• [REDACTED]</li> <li>• Southern road access.</li> <li>• [REDACTED]</li> </ul>

**Infrastructure Issues are blacked out**

Source: KPMG Analysis

#### 4.6.2 Rail freight network capacity assumptions

Document is very easy to read !



**We have approached these groups and everybody is happy therefore we can continue!!!!**

**We cannot even read the report!!!! We are trying to get answers to technical questions but we cannot.**

### **1.10 What interaction is required with the NSW Government, ARTC and other stakeholders?**

Continued engagement and collaboration is necessary between the Commonwealth, NSW Government, ARTC, community stakeholders and commercial stakeholders to manage issues which could have a material impact on the Moorebank IMT Project.

Stakeholders have been grouped into three broad categories – Community, Government and Commercial. The stakeholders that the Project Team has engaged with, and would continue to engage with, is summarised in Table 1.28.

Table 1.28 – Moorebank IMT – Stakeholder Categories		
Community Stakeholders	Government Stakeholders	Commercial Stakeholders
<ul style="list-style-type: none"><li>Local residents</li><li>Community Groups – both local and broader Sydney</li><li>Academics and</li></ul>	<ul style="list-style-type: none"><li>Federal Government</li><li>NSW Government</li><li>Local Government</li></ul>	<ul style="list-style-type: none"><li>Rail Logistics and IMT Operators</li><li>Port Operators</li></ul>

45

**Developer Should Pay**

**Not Liverpool Community**

**Not the Taxpayer**

- **Traffic**
- **Pollution**
- **Economics**
- **What I want to see**

# 1 Use of realistic numbers

The government Intermodal capacity is 1.7 million containers.

Could be looking at more than 2 times the truck trips.

**Not 42,000 truck trips a day but 84,000 truck trips per day**

Traffic engineers calculate each truck as equal to 2 passenger car units.

Sydney Harbour Bridge has about 160,000 trips per day

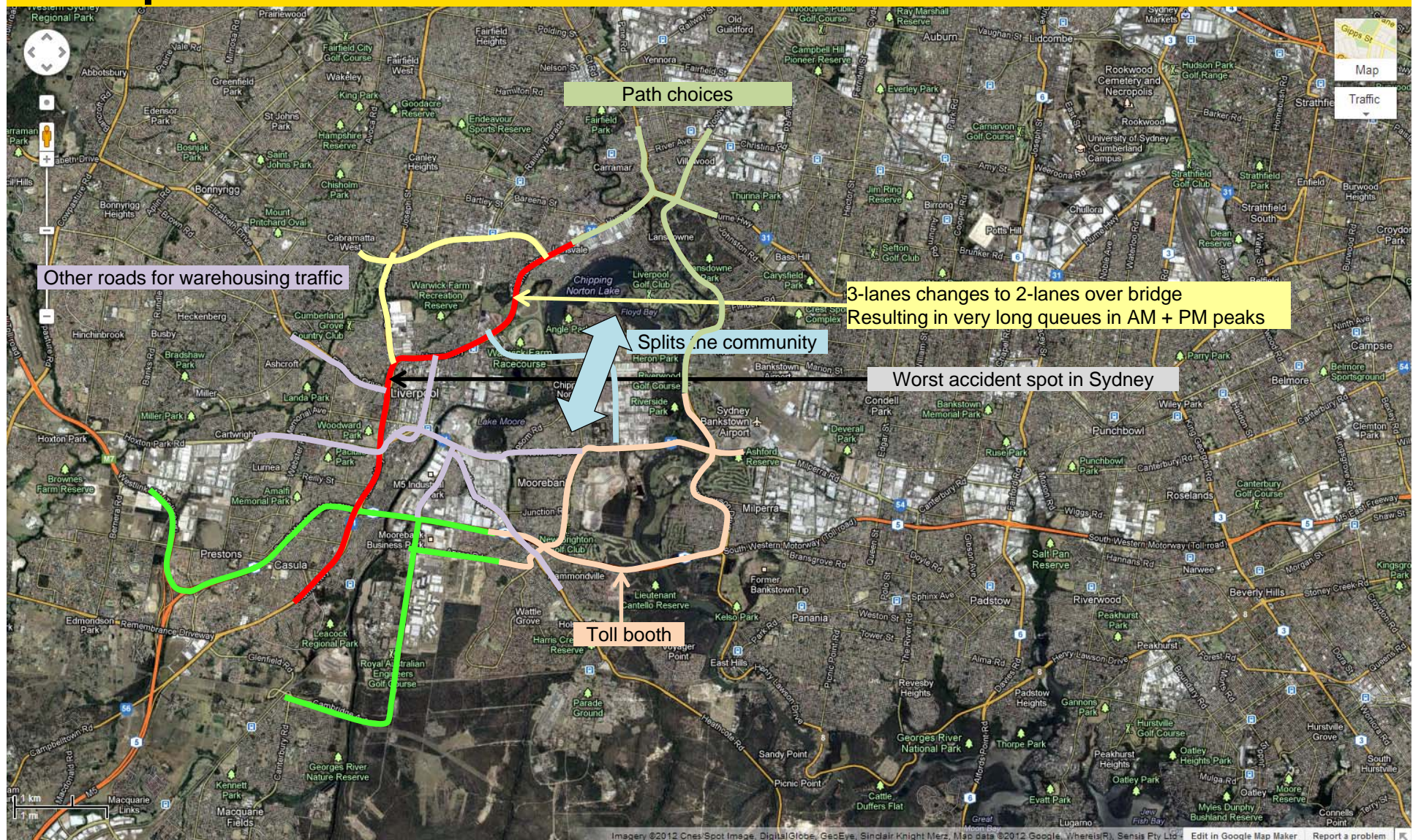
We are concerned about the order of magnitude.



**This would require unrestrained infrastructure and warehousing space.**

# 2

Larger study area which includes the roads that will be impacted



# 3 $\text{PM}_{2.5}$ studied as it causes cancer.

**Diesel Exhaust Emissions contain Carcinogens** e.g. (PM<sub>2.5</sub>), benzene and polycyclic aromatic hydrocarbons

(PM<sub>2.5</sub>) have, to a large extent, in urban areas with large combustion. This means that, in composed of smaller particles and would generally contain acids and carcinogenic substances that are associated with combustion. This is particularly significant for diesel exhaust emissions which are predominantly comprised of fine (PM<sub>2.5</sub>) and ultra-fine particulate matter (< PM<sub>1</sub>) and can contain carcinogenic compounds such as benzene and polycyclic aromatic hydrocarbons (PAHs).

Appendix J: Air Quality Impact Assessment, SIMTA, SYDNEY INTERMODAL TERMINAL Alliance, Part 3A Concept Plan Application  
Queensland Environment Pty Ltd trading as **PAEHolmes** ABN 86 127 101 642 -- Page 13

This is particularly significant for **diesel exhaust emissions** which are predominantly comprised of fine (PM<sub>2.5</sub>) and ultra-fine particulate matter (< PM<sub>1</sub>) and can **contain carcinogenic compounds** such as benzene and polycyclic aromatic hydrocarbons (PAHs).

# 4 Economics fully evaluated

Increasing capacity on the M5

Increasing capacity on the Hume Highway and other hot spots - Very Costly Intersection Improvements

Required - Hume + M5, Hume + West Hoxton Park Rd, Hume + Moore St (bus priority), Hume + Elizabeth Dr, Hume + Campbell St (Westfield's), Hume + Orange Grove Rd, Moorebank Rd + Heathcote Rd, Moorebank Rd + Newbridge Rd, Nuwarra Rd + Heathcote Rd, Two bus priority measures

Bridge on Cambridge Ave

- Building the rail spur line \$500 million? (elevated)
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**A good economic analysis will include these costs as dis-benefits to society**

**Thank you for taking the time to read my very  
real concerns.**