

July, 2005

Railing Port Botany's Containers

**PROPOSALS TO
EASE PRESSURE
ON SYDNEY'S ROADS**



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Letter to the Minister

Hon. Craig Knowles MP
Minister for Infrastructure and Planning
and Minister for Natural Resources
Level 33, Governor Macquarie Tower
1 Farrer Place
Sydney NSW 2000

29 July 2005

Re: Freight Infrastructure Advisory Board Report

My Dear Minister,

I have pleasure in presenting the report of the Freight Infrastructure Advisory Board titled *Railing Port Botany's Containers: Proposals to Ease Pressure on Sydney's Roads*.

I wish to record my appreciation to each of the members of the Advisory Board for their assistance in preparing this report.

I also wish to record my appreciation to the staff of the Transport Planning Division of the Department of Infrastructure, Planning and Natural Resources for their invaluable assistance.

I commend the report for your consideration.

Yours sincerely,



Laurie Brereton



List of Recommendations

RECOMMENDATION 1

It is recommended that:

- The 40 percent rail share target must be met and if possible exceeded; and
- Government and industry embrace strategies to further lift the rail freight share.

RECOMMENDATION 2

It is recommended that:

- The NSW Government take all necessary steps to ensure that Sydney has sufficient additional intermodal terminal capacity to meet a rail freight share of 40 percent;
- Intermodal terminals be treated as critical infrastructure under NSW planning provisions; and
- Sydney's future network of intermodal terminals be connected to Port Botany by way of dedicated freight rail lines.

RECOMMENDATION 3

It is recommended that:

- Sydney Ports Corporation's Enfield site be developed as an integrated logistics facility to meet local and sub-regional requirements;
- Enfield be limited in throughput size to 300,000 TEUs per annum and be operational before the end of 2008;
- Participation from the private sector be sought for the site's development and the terminal's ongoing operation; and
- The Roads and Traffic Authority review road improvements necessary to support the Enfield development with funding available from the Freight Infrastructure Charge to assist in these works (see Recommendation 22).

RECOMMENDATION 4

It is recommended that the NSW Government:

- Regard Moorebank as a key component in meeting Sydney's intermodal capacity needs;
- Ensure that the Moorebank site is secured for intermodal terminal development by the private sector and be prepared if necessary, on a transitional basis, to use funds from the Freight Infrastructure Charge for this purpose;
- Work with the Commonwealth to see the School of Military Engineering moved from the site as soon as possible;
- Commence planning for the site's development by the private sector as an intermodal terminal with the capacity to handle at least 500,000 TEUs annually;

- Develop a business model for the acquisition and development of the site in a way that allows the private sector to bring forward the terminal's development;
- Pursue negotiations with the Commonwealth for AusLink funding for an Australian Rail Track Corporation rail connection into the Moorebank site;
- Ensure that access to the Moorebank site is delivered in a way that does not compromise the future expansion of the East Hills passenger line; and
- Ensure planning for Moorebank includes design buffers to reinforce the site's separation from residential development and provide public recreation facilities along both sides of the Georges River.

RECOMMENDATION 5

It is recommended that, subject to a favourable decision in the proceedings currently before the Land and Environment Court, the Ingleburn intermodal project should be supported through:

- The development of a Master Plan for the optimum layout of the site;
- Environmental safeguards, particularly relating to noise and light spill, being imposed; and
- Suitable road and rail links being established.

RECOMMENDATION 6

It is recommended that the Minto project should be supported subject to:

- The development of a Master Plan for the enlarged site;
- Environmental safeguards, particularly relating to noise and light spill, being imposed;
- Suitable road and rail links being established;
- The NSW Government commencing negotiations with the current owners of the Minto rail freight siding with a view to its reacquisition as a common user facility. (Funding to be available from the Freight Infrastructure Charge for this purpose); and
- The provision of a crossing loop and a high-speed crossover of the Main South Line from the Southern Sydney Freight Line to access the site to and from the north in a way that minimises the impact of the development on passenger rail services.

RECOMMENDATION 7

It is recommended that:

- Subject to the Minto and Ingleburn projects proceeding, the Roads and Traffic Authority and Campbelltown City Council commence planning

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.

RECOMMENDATION 14

It is recommended that:

- The Australian Rail Track Corporation take control of the Sydney Metropolitan Freight Network as soon as possible;
- RailCorp and the Australian Rail Track Corporation reach early agreement on operational issues to facilitate the above; and
- The Australian Rail Track Corporation assess the infrastructure requirements of the Sydney Metropolitan Freight Network including additional staging and passing loops.

RECOMMENDATION 15

It is recommended that:

- The Botany Freight Line's "Stage Four" amplification be brought forward using AusLink funds;
- The corridor be protected to ensure that the Line can operate without long term capacity constraints;
- The NSW Government declare this project as critical infrastructure under NSW planning provisions;
- A Master Plan for the Botany Freight Line be prepared by the Port Botany Logistics Chain Team (see Recommendation 21);
- The vehicular level crossing at General Holmes Drive be closed without further delay. The NSW Government plan and construct a new road link under the freight rail line in the vicinity of Wentworth Ave;
- Funding for this project be available from the Freight Infrastructure Charge with the Roads and Traffic Authority including this project in its forward three year capital program;
- A pedestrian overpass be built over the Botany Freight Line at Banksia St, Botany, followed by the closure of the existing pedestrian level crossing;
- Funding for this project be available from the Freight Infrastructure Charge with RailCorp to include the project in its 2006-07 Budget capital works program; and
- Freight Infrastructure Charge funds be available for the construction of noise attenuation barriers along the Botany Freight Line, with their location to be determined in the approvals process.

RECOMMENDATION 16

It is recommended that:

- The Australian Rail Track Corporation bring forward its investment in the Southern Sydney Freight Line;

- The NSW Government declare the Southern Sydney Freight Line as critical infrastructure under its new planning provisions;
- Final design of the Southern Sydney Freight Line incorporate a potential connection to a future Western Sydney Freight Line; and
- Freight Infrastructure Charge funds be available to assist with noise attenuation measures to the extent of any NSW Government liability.

RECOMMENDATION 17

It is recommended that:

- The timing of construction works to amplify the M5 and new road connections between the Port and the M4 take into account the Government's success in moving containers off road and onto rail; and
- In the interim, planning proceed for the provision of additional truck capacity in both these corridors.

RECOMMENDATION 18

It is recommended that:

- The NSW Government pursue the implementation of a national truck tracking scheme in consultation with the industry; and
- The issue of tracking intermodal trucks be revisited as soon as these new nationally consistent arrangements are in place.

RECOMMENDATION 19

It is recommended that:

- The continued expansion of Port Botany be strongly supported.

It is further recommended that the Port's Strategic Master Plan make provision for:

- The installation of weighbridges;
- Substantially improved onsite parking capacity for container freight trucks;
- Measures to end the present ad hoc arrangements for off site parking; and
- On site driver facilities including meeting and lunch facilities, as well as general amenities.

RECOMMENDATION 20

It is recommended that:

- Sydney Ports Corporation urgently seek agreement of the stevedores to ensure that state-of-the-art rail interfaces are available in respect of both Patrick's and P&O's operations.

It is recommended that these interfaces provide for:

- Capacity to receive, load and unload 600m push-pull unit trains;

- The consolidation of train cargo to single inter-modal destinations; and
- Reduced turnaround times using dedicated rail handling equipment.

It is further recommended that the stevedores:

- Progress the implementation of both road and rail operations towards a 24 hours a day, seven days a week basis;
- Embrace a proactive and cooperative approach with the rest of the supply chain to maximise the chain's utilisation and efficiency; and
- In the pursuit of these goals, Sydney Ports Corporation be prepared, if necessary, to activate the Corporation's lease powers.

■ RECOMMENDATION 21

It is recommended that:

- A Port Botany Logistics Chain Team be established to manage the logistics task, to optimise the effectiveness of the port-rail-road interface and enhance capacity on the infrastructure network;
- The Team's Steering Group (see diagram) should be independently chaired;
- The Logistics Chain Team be responsible for setting best practice rules and terminal and train operating standards for the system;
- The Logistics Chain Team have the delegated authority to allocate train paths on the rail freight network and oversee improved utilisation of road movements in and out of the terminal, including management of off peak access and two-way loading;
- The Logistics Chain Team operate as a self-regulating body, subject to a review of its effectiveness after two years of operation;
- Alternative governance models be considered in the event of self regulation not proving successful; and
- ACCC approval be sought for the establishment and implementation of the Logistics Chain Team.

■ RECOMMENDATION 22

It is recommended that:

- The Government legislate for a Freight Movements Management Act to give effect to the Freight Infrastructure Charge;
- The Government consider a Charge set at \$30 per TEU, collected on all import and export containers;
- The Charge be fully rebated for;
 - Containers carried to or from the Port by rail; and

- Containers carried to or from the Port by road during designated night-time off peak hours.
- Sydney Ports Corporation collect and rebate the Charge;
- Proceeds from the Charge be deposited into a Freight Movements Management Fund to be held and administered by the Director General of the Department of Infrastructure, Planning and Natural Resources, constituted as a statutory corporation;
- The statutory corporation administering the Fund be constituted with power to acquire land, commission research and make funds available for capital and other projects;
- The Fund have the power to borrow and in particular to securitise future revenues from the Charge;
- Revenue from the Charge be hypothecated and only expended on projects and initiatives linked to this intermodal strategy;
- After two years' operation, the Charge be subject to a review process, involving industry, and reported to the NSW Parliament;
- The statutory corporation be required to consult with such bodies or persons as the Minister for Infrastructure and Planning directs from time to time; and
- The personnel and other resources to administer the Fund be provided by the Department of Infrastructure, Planning and Natural Resources.

■ RECOMMENDATION 23

It is recommended that:

- The NSW Government consider providing support for programs that lift the skills of drivers;
- Occupational Health and Safety (OH&S) Act provisions be pursued through appropriate security and safety training;
- The Government promote the up skilling of drivers, both rail and road, to service the new transport network logistics chain and intermodal terminals; and
- Support from the Fund be available for registered employer/employee organisations in the pursuit of these initiatives.

Introduction

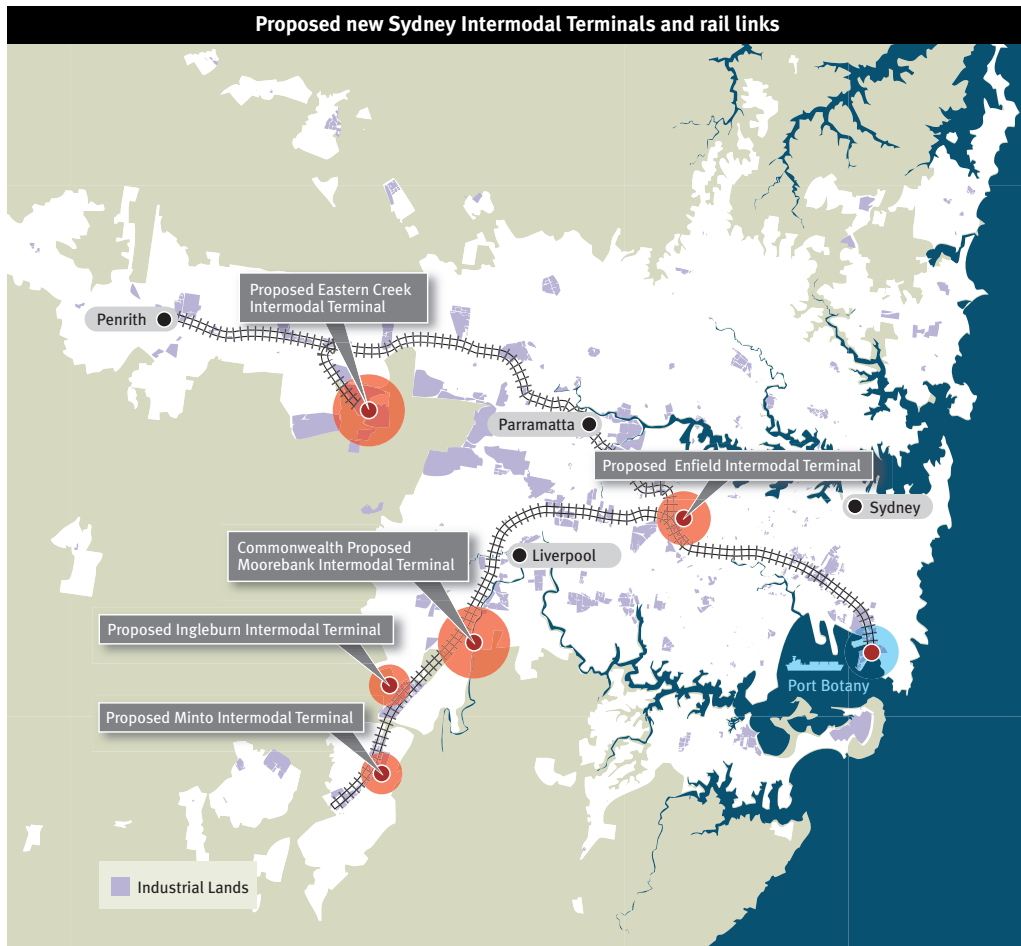
The Minister for Infrastructure and Planning and Minister for Natural Resources, the Hon Craig Knowles MP, announced in December 2004 that a Freight Infrastructure Advisory Board would be established to help develop the Government's Port Freight Plan for Sydney.

The members of the Advisory Board are listed in Appendix A.

The Advisory Board was charged with examining means of increasing the rail share of freight throughput at Port Botany. Rail's share currently sits at 19.5 percent and is in decline. The Government wants to increase it to 40 percent by 2011. To achieve this target in the out years will require a fourfold increase in rail freight volumes.

This Advisory Board believes that the target must be met if Sydney is to remain economically competitive and environmentally sustainable.

It should be understood that this report is confined to the movement of import and export containers within the Sydney basin. It does not deal with other issues including the interstate movements of containers.



Advisory Process

The Terms of Reference for the Board were:

- To advise the Minister on major freight infrastructure policy and project matters, following a reference from the Minister;
- To advise the Minister on legislative and regulatory initiatives which may be developed to support the delivery of the Government's freight infrastructure objectives, following a reference from the Minister; and
- To advise on other relevant issues as requested by the Minister.

Specifically, the Advisory Board was asked to provide to the Minister advice on the following areas:

- An intermodal terminal network to improve freight distribution;
- Transport infrastructure required to support such a metropolitan terminal network;
- The structure, amount, means of collection and economic impact of a possible port freight charge on containers moved by road to and from Port Botany;
- Potential changes to work practices including 'truck tracking' to minimise queuing at the port gate; 'container in/container out' to maximise the efficiency of truck haulage; and other strategies to minimise unnecessary movement of containers across the city;
- How to maximise Federal funding support for the implementation of the freight strategy, and
- Liaison with industry stakeholders.

The Board developed an industry consultation process to seek the views of stakeholders within the logistics chain. Stakeholders were asked to provide written submissions on the following issues:

- The design of an expanded intermodal freight network to meet the future needs of the logistics chain;
- The associated freight infrastructure required to support an intermodal freight network;
- Potential changes to current work practices to increase the efficiency of truck and rail freight operations; and
- The quantum of the Freight Infrastructure Charge to fund freight infrastructure improvements and the best method of collection.

Submissions were received from individuals and organisations listed in Appendix B. Themes which emerged in submissions related to:

- The development of terminals – their number, scale and associated uses, eg the need for Customs clearances;
- The need to develop both rail networks (preferably dedicated) and road networks to support the movement of containers;
- Changes in operating arrangements to maximise the use of existing infrastructure and secure the most from new investment, eg 24/7 operations, information management, logistics chain co-ordination;
- The need for government and the private sector to work together;
- The proposed Freight Infrastructure Charge, eg whether it was required, its amount, and method of collection; and
- The need for integrated planning of all elements of the inter-modal freight system.

Historical Context

This report and its consideration of intermodal freight needs to be viewed in its historical context.

Since Port Botany's inception as a container facility in the 1970s, the planning and management of freight transportation across Sydney has been fragmented.

As Sydney has expanded, so too has the spread of its industrial and economic activity.

No longer are the industries relevant to Port Botany – warehousing, container storage and handling – concentrated around Botany and Alexandria.

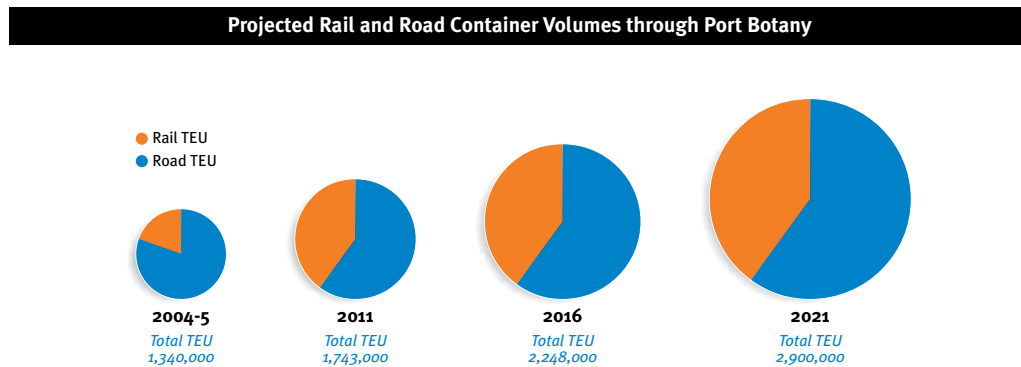
New industrial and warehousing activities have fanned out across Sydney, attaching themselves to new arterial roads like the M4, M5 and the soon to be completed M7.

A rail share target of 40 percent

There will continue to be significant growth in the movement of containers. However, Sydney has a choice as to how it handles this growth.

The Government has set a target of increasing rail's share of throughput at Port Botany to 40 percent by 2011. This Advisory Board is strongly of the view that this target must not only be reached but if possible exceeded.

Applying the Government's target to the following container movement projections at Port Botany yields the rail and road volumes shown in the figure below.



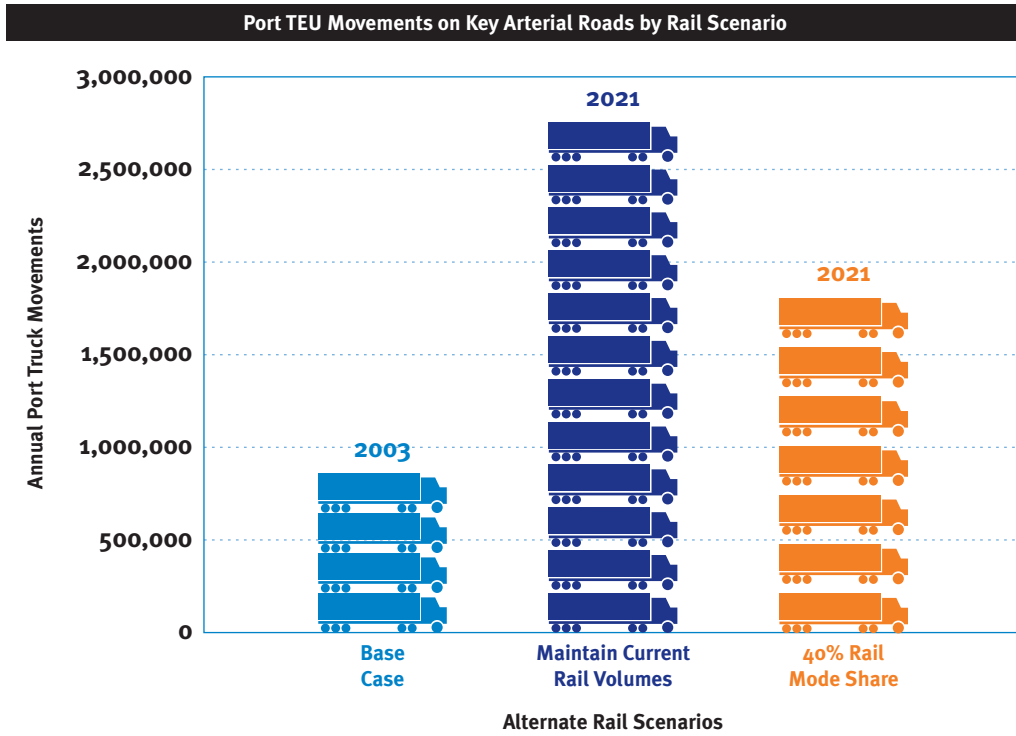
Footnote: A TEU is a 20ft equivalent unit container – the standard industry measure.

** Source: Summary Report, Draft Metropolitan Intermodal Freight Strategy, DIPNR, October 2004*

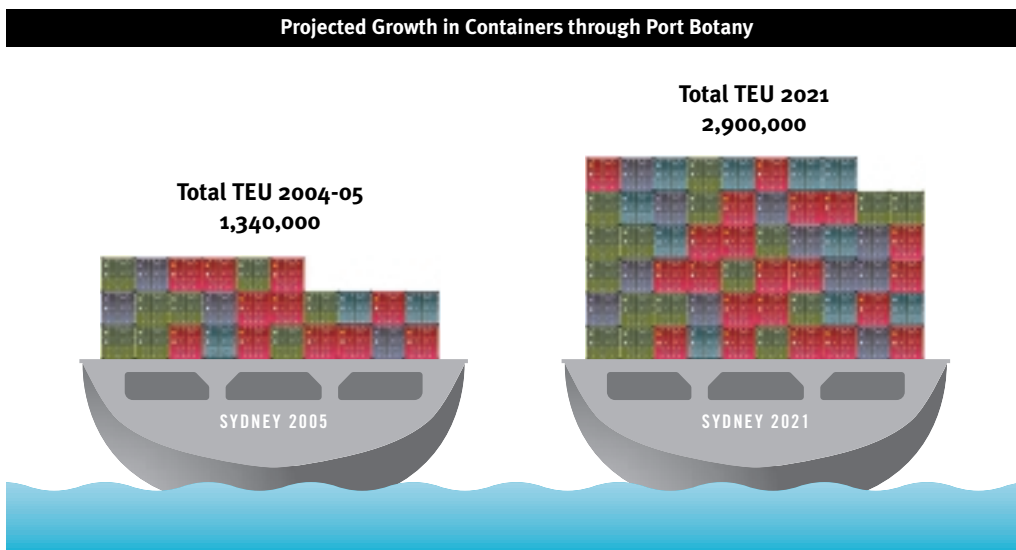
** 2004-05 Total TEU total does not include approximately 40,000 transshipments within the Port*

** 2004-05 figures are estimates as provided by Sydney Port Corporation*

The following diagram illustrates the explosion in TEU movements by road if there is not a significant jump in rail freight share.



Source: Summary Report, Draft Metropolitan Intermodal Freight Strategy, Department of Infrastructure, Planning and Natural Resources, October 2004.





The Challenge Facing Sydney and NSW

Over the ten years to June 2004, the NSW economy grew by approximately 42 percent from around \$190 billion to \$270 billion per annum. Approximately three quarters of that activity is in the Sydney region. Employment in the Sydney region also grew over the same period by 21 percent to 2,108,000 in June 2004. Import/export trade growth through Port Botany over this period was a significant driver of this economic and employment growth. NSW and Sydney need to continue to plan for growth in port activity if the State's economy is to remain robust.

Over the past decade, Port Botany has experienced an average annual growth rate in throughput of 8 percent. It handled 1.2 million TEUs 2003-04, 1.34 million TEUs in 2004-05 and volume is forecast to grow at a rate of 5 to 6 percent annually to approximately 3 million TEUs by the early 2020s.

This growth demands a clear and coordinated plan to manage the movement of freight across the Sydney metropolitan area. The cost of neglecting this would be damning for Sydney's economic and environmental future.

It is this Advisory Board's view that managing the consequences of future growth is an absolute imperative.

The forecast increases in capacity and demand will over time require substantial investment in the freight networks across Sydney by the Federal and State Governments and the private sector.

It will also involve very substantial challenges for the intermodal logistics chain to and from Port Botany.

■ RECOMMENDATION 1

It is recommended that:

- The 40 percent rail share target must be met and if possible exceeded; and
- Government and industry embrace strategies to further lift the rail freight share.

Economic value of the Port for Sydney and NSW

Port Botany is a vital component of Sydney's economy and our national infrastructure.

Over 20 shipping lines service more than 100 destinations around the world from Port Botany.

Sydney Ports Corporation's terminals:

- Contribute over \$2.5 billion per annum to the State economy (in 2002 dollars);
- Handle over \$45 billion in domestic and international trade;
- Generate more than 17,000 jobs; and
- Handle nearly one third of Australia's containerised trade.

* Source: Sydney Ports Corporation

At the port itself, the role of stevedores in managing and handling throughput is critical. The stevedores' role has significant implications beyond their core business operations at the dock.

The Australian Competition and Consumer Commission recently reported that Australian stevedores enjoyed an average return on assets of 27.8 per cent in 2003-04.

** Source: The Australian Competition and Consumer Commission Monitoring Report No 6, November 2004*

While this Advisory Board notes the stevedores' present and proposed capital investment programs, it remains the case that the stevedores' significant margin gains have not been matched by benefits across the entire supply chain.

In releasing the Australian Competition and Consumer Commission's Report, Commissioner Graeme Samuels argued the case for continued competitive tensions: "If the industry is beginning to experience capacity constraints, then it is important from a competition perspective to see new investment attracted to the industry's rising margins. This would expand capacity, alleviate congestion and ensure maintenance of service levels."

Sydney requires both best practice port arrangements and a best practice freight distribution network. It must, however, be observed that at present significant cost impacts are being carried by other industries using the port and along the supply chain due to inefficiencies in Sydney's port distribution interface.



An Intermodal Network for Sydney

Introduction

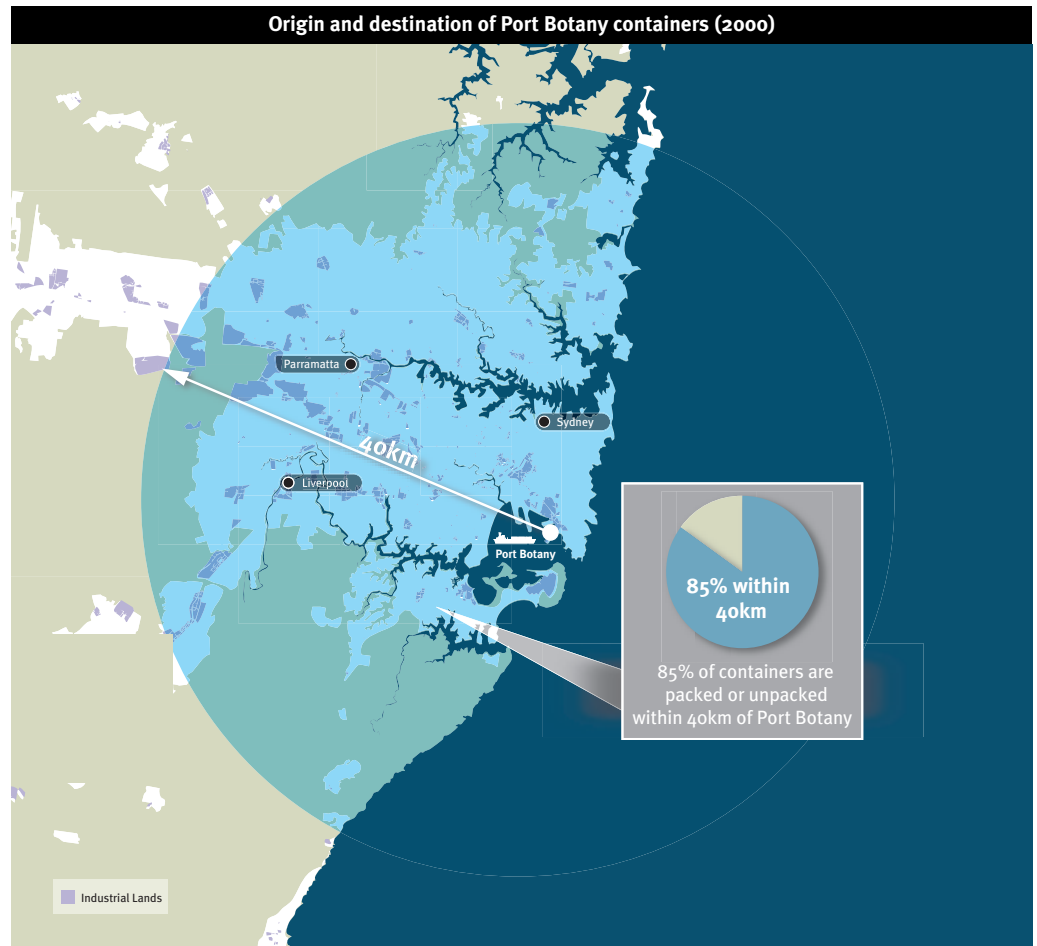
Over the last 20 years, industrial and distribution activities have moved from areas around Port Botany to suburbs in Sydney's central west. This process of economic change is continuing, with industry and distribution moving further west and to the south-west. The supply of industrial land in the metropolitan sub-regions noted below bears this shift out.

Independent research commissioned by the Department of Infrastructure, Planning and Natural Resources suggests that over the next five years, 1.9 million square metres of industrial floorspace will come on line.

Western Sydney is forecast to supply 48 percent of this new floorspace, followed by South West Sydney with 20.6 percent and the Central West with 15.1 percent. Of this projected growth, nearly 70 percent will be used for the warehousing industry and distribution centres.

In total, Western Sydney and South West Sydney are expected to provide the greatest long-term industrial and employment growth with over 70 percent of Sydney's industrial floorspace projected to be located in these areas by 2027.

The existing intermodal network for import and export containers comprises four relatively small intermodal container terminals – Camellia, Yennora, Leightonfield and Minto. Their combined annual throughput is 140,000 TEUs.



The Advisory Board's enquiries confirmed that the existing terminals generally service customers located relatively close to the terminals themselves. Submissions to the Advisory Board suggest that it is reasonable to expect that this functional arrangement will apply at new terminals developed under this strategy. This involves, in effect, containers being transported longer distances by rail followed by shorter haul by road to their end destination.

With the exception of Minto as outlined later in this report, the existing terminals are located on constrained sites with limited capacity for growth. While these terminals will have a minor role to play in helping meet the Government's 40 percent rail freight target, a larger network to meet future growth in volumes will need to be rolled out over the next 15 years.

This Advisory Board expects that, by 2020, Sydney will require an aggregate intermodal terminal capacity of least 1.2 million TEUs each year. Capacity for the network to substantially exceed this figure in order to accommodate further port growth and higher rail mode share should be pursued.

■ RECOMMENDATION 2

It is recommended that:

- The NSW Government take all necessary steps to ensure that Sydney has sufficient additional intermodal terminal capacity to meet a rail freight share of 40 percent;
- Intermodal terminals be treated as critical infrastructure under NSW planning provisions; and
- Sydney's future network of intermodal terminals be connected to Port Botany by way of dedicated freight rail lines.

Servicing the Central West

In 2002, the Sydney Ports Corporation released a proposal for a 500,000 TEUs per annum intermodal terminal on land it had acquired at Enfield.

At the time, the Corporation envisaged Enfield as Sydney's major inland terminal – it was to be Sydney's inland port.

Having withdrawn its original proposal and in light of the findings of an Independent Review, Sydney Ports Corporation now proposes a substantially smaller facility at Enfield, with capacity reduced from 500,000 TEUs down to 300,000 TEUs per annum.

Sydney Ports Corporation has indicated that, should its new proposal be approved, it could be operational within three years and be available to provide capacity as a first step in achieving the Government's 40 percent rail share target.

Having considered this particular proposal, the Advisory Board believes Enfield should be supported as an early step towards developing new capacity to meet Sydney's intermodal needs.

■ **RECOMMENDATION 3**

It is recommended that:

- Sydney Ports Corporation's Enfield site be developed as an integrated logistics facility to meet local and sub-regional requirements;
- Enfield be limited in throughput size to 300,000 TEUs per annum and be operational before the end of 2008;
- Participation from the private sector be sought for the site's development and the terminal's ongoing operation; and
- The Roads and Traffic Authority review road improvements necessary to support the Enfield development with funding available from the Freight Infrastructure Charge to assist in these works (see Recommendation 22).

Servicing the South West

Moorebank

In 2004, the Commonwealth Government released a plan to develop an intermodal terminal on soon-to-be surplus defence lands at Moorebank.

The Howard Government's 2004 Election Policy – *Building our National Transport Future* – noted “the lack of an intermodal freight terminal in Sydney is an impediment to the national transport of freight”.

The then Federal Transport Minister, the Hon John Anderson, said: “The Moorebank site is an ideal location as it provides ready access to the interstate road and rail network, the WestLink ring road and connections to Sydney's ports via the proposed Southern Sydney rail freight line to be constructed under AusLink.” (Source: Media Release, September 15, 2004.)

Building our National Transport Future further committed the Commonwealth to establish a joint taskforce with the NSW Government to guide the transition of the land and determine a timeframe for establishing the intermodal terminal.

Minister Anderson said “the NSW Government will be invited to join the taskforce to ensure that development of the road and rail hub was consistent with planning for the area and the overall freight strategy in the Sydney Basin”. (Source: Media Release, September 15, 2004).

This Advisory Board notes that the Commonwealth is yet to invite the NSW Government to participate in the proposed taskforce.

The Moorebank site is ideally placed in the South Western corridor with access to the proposed Southern Sydney Freight Line, the M5 road corridor and Western Sydney through the M7 corridor.

The Moorebank site is currently occupied by the Australian Army’s School of Military Engineering. The Army plans to relocate the School to an interstate defence establishment. Defence representatives informed the Advisory Board that, subject to Commonwealth agreement, it may be possible for the School to vacate Moorebank as early as 2011.

The departure of the Army would allow the site to be secured and developed by the private sector as a state-of-the-art intermodal terminal with a capacity of at least 500,000 TEUs.

Following the intervention of this Advisory Board, the Commonwealth suspended its May 2005 tender process to sell land adjacent to the Moorebank site. This land will, in part, be required for road access to connect the Moorebank site to the M5.

It is the view of this Advisory Board that the development of an intermodal terminal at Moorebank will be critical in the provision of sufficient intermodal terminal capacity to meet the 40 percent rail freight target.

We would see the NSW Government’s role as a facilitator to ensure the intermodal development proceeds in a timely and planned manner.

Ideally, the Commonwealth should continue to hold the site until it is developed as an intermodal terminal by the private sector.

The Minister for Infrastructure and Planning should maximise the use of the State’s planning powers in order to achieve the protection of this site for development as an intermodal terminal.

If necessary, NSW should be prepared to purchase the site until it is passed to the private sector for development.

Whichever approach is taken, the Advisory Board recommends the following conditions should guide development of the Moorebank terminal:

- Open access use of the facility;
- Proper master planning of the site;
- Timely development of the rail connections (in conjunction with the Australian Rail Track Corporation);
- Protection of the open space corridor along the Georges River; and
- Maintenance of the buffers between the site and existing residential areas.

■ RECOMMENDATION 4

It is recommended that the NSW Government:

- Regard Moorebank as a key component in meeting Sydney's intermodal capacity needs;
- Ensure that the Moorebank site is secured for intermodal terminal development by the private sector and be prepared if necessary, on a transitional basis, to use funds from the Freight Infrastructure Charge for this purpose;
- Work with the Commonwealth to see the School of Military Engineering moved from the site as soon as possible;
- Commence planning for the site's development by the private sector as an intermodal terminal with the capacity to handle at least 500,000 TEUs annually;
- Develop a business model for the acquisition and development of the site in a way that allows the private sector to bring forward the terminal's development;
- Pursue negotiations with the Commonwealth for AusLink funding for an Australian Rail Track Corporation rail connection into the Moorebank site;
- Ensure that access to the Moorebank site is delivered in a way that does not compromise the future expansion of the East Hills passenger line; and
- Ensure planning for Moorebank includes design buffers to reinforce the site's separation from residential development and provide public recreation facilities along both sides of the Georges River.

A number of private proposals for new and expanded terminals in South Western Sydney have been reviewed by the Advisory Board as private sector initiatives.

They are:

- Patrick Corporation's plan for a new intermodal terminal at Ingleburn;
- A plan by a consortia involving the Macarthur Intermodal Shipping Terminal and Austrak for an expanded terminal at Minto; and
- Sydney Railport Facility's plan for an intermodal terminal and business park at Menangle.

Ingleburn

Patrick Corporation proposes to develop a new intermodal terminal at Ingleburn adjacent to its car pre-inspection and servicing facility. The Environmental Impact Statement for the project indicates a proposed capacity to service 43,000 cars and 54,000 TEUs annually.

The Advisory Board believes Patrick's planned intermodal terminal at Ingleburn can assist in meeting Sydney's future intermodal capacity requirements.

■ RECOMMENDATION 5

It is recommended that, subject to a favourable decision in the proceedings currently before the Land and Environment Court, the Ingleburn intermodal project should be supported through:

- The development of a Master Plan for the optimum layout of the site;
- Environmental safeguards, particularly relating to noise and light spill, being imposed; and
- Suitable road and rail links being established.

Minto

The Macarthur Intermodal Shipping Terminal (MIST) at Minto has existing throughput of approximately 36,000 TEUs per year.

MIST and Austrak – a company with an adjacent land interest – are seeking to significantly expand this facility. Discussions with the proponents indicate that development of the Minto facility has the potential to add at least 200,000 TEUs capacity to the network.

Their proposed development incorporates an enlarged import/export facility to cater for port trains, with sidings of 600m, as well as an interstate facility, with sidings of 1800m.

A significant shortcoming of the arrangements at the Minto site involves the current rail siding, approximately 350m long, which needs to be developed and lengthened.

This siding had been owned and operated by NSW Freight Corp, before being bundled into assets sold to Pacific National, which in turn jointly used the siding along with MIST.

Subsequently, Pacific National ceased operations on the siding and sold the facility to other interests associated with Patrick Corporation – the proponents of the intermodal terminal at nearby Ingleburn.

Since then, new access charges have been applied and then substantially increased. Commercial disputation has been a feature of the current arrangements.



Existing Minto intermodal terminal Source: DIPNR

This Advisory Board believes that it is undesirable for one operator's rail access to its intermodal terminal to be controlled by interests associated with a competitor.

We are of a view that the proposed expansion of the existing MIST terminal at Minto, in conjunction with adjoining properties of Austrak and ING, can assist in meeting Sydney's future intermodal capacity demand.

■ RECOMMENDATION 6

It is recommended that the Minto project should be supported subject to:

- The development of a Master Plan for the enlarged site;
- Environmental safeguards, particularly relating to noise and light spill, being imposed;
- Suitable road and rail links being established;
- The NSW Government commencing negotiations with the current owners of the Minto rail freight siding with a view to its reacquisition as a common user facility. (Funding to be available from the Freight Infrastructure Charge for this purpose); and
- The provision of a crossing loop and a high-speed crossover of the Main South Line from the Southern Sydney Freight Line to access the site to and from the north in a way that minimises the impact of the development on passenger rail services.

Road access to Minto and Ingleburn

Should the development of the intermodal terminals at Minto and Ingleburn proceed, they will need to be accessed by way of a truck route between the terminals and the F5 Freeway.

■ RECOMMENDATION 7

It is recommended that:

- Subject to the Minto and Ingleburn projects proceeding, the Roads and Traffic Authority and Campbelltown City Council commence planning 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.

Menangle

Sydney Railport Facility has raised the prospect of developing a 60ha portion of a larger land holding between the Main Southern Line and the M5 close to Menangle as an intermodal terminal and business park. This facility would have the capacity to accommodate freight trains up to 1800m length.

Development of adjoining land to support associated activities including warehousing and transport related industries is also envisaged at Menangle.

The Railport facility has the potential to assist in the servicing of interstate movement of freight. However, its location at the far south western edge of Sydney militates against its attractiveness as an import/export intermodal facility. Such facilities should, ideally, be relatively central to the areas they serve. The Menangle site would see import containers moved by rail beyond their likely end destination, and then transported between 10 and 20km back by road.

Having considered this proposal, this Advisory Board is of a view that Menangle is not an ideal location for servicing import/export traffic.

■ 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.

Servicing Western Sydney

Having reviewed a number of potential sites in Western Sydney, the Advisory Board has identified a large private land holding at Eastern Creek as the best of the available sites to meet the strategic needs of this region.

The site is north of Old Wallgrove Road and the Sydney West substation. The land is mostly open pasture, and zoned for employment purposes under State Environmental Planning Policy No.59. A small portion at the northern edge of the site has been identified as part of a proposed riparian corridor connecting Eastern Creek and Ropes Creek. It is not expected to hinder the site's future development or capacity.

The site's location affords access to the economic and industrial zones of Western Sydney via the M7 and the M4 arterial roads.

It is our view that the Eastern Creek site should be reserved for the development of an intermodal terminal to service Western Sydney. Unless the site is protected, there is a significant risk that it may be developed in a way that compromises its use as an intermodal terminal servicing the Western Sydney industrial markets.

As with the Moorebank site, the State's planning powers should be used to reserve the site for development as an intermodal terminal.

The other critical terminal and port elements of the freight network – the port itself, Enfield and the proposed Moorebank terminal – are all presently in public ownership, with the land being made available (or, in the case of Moorebank, hopefully to be made available) to the private sector for development. Initial public ownership of the Eastern Creek site is, in our view, the best means of ensuring that master planning is comprehensive and that there are adequate common-user, open access opportunities available to industry.

Accordingly, it is the Advisory Board's view that the Eastern Creek site should be reserved, consolidated and then made available on suitable terms to the private sector for development as an intermodal terminal.

The Advisory Board has reviewed an independent study commissioned by the Department of Infrastructure, Planning and Natural Resources that examined various options for connecting the Eastern Creek site to the Southern Sydney Freight Line (to be developed by the Australian Rail Track Corporation) and the Main West Line. The consultant's recommended option involved design and construction costs of around \$1.37 billion comprising:

- Southern Sydney Freight Line to Eastern Creek – \$1.131bn;
- Eastern Creek to Main West Line – \$241 million; and
- Additional costs for land acquisition, risk and preparation in excess of \$200 million.

Source: Report prepared by Halcrow, commissioned by Department of Infrastructure, Planning and Natural Resources, June 2005

Constraints on the route from existing industrial and residential development require 18km of the line to be built on a viaduct, involving very significant environmental impacts.

The Advisory Board has concluded that the high cost and environmental impacts of this particular engineering solution make it unacceptable.

Other options for a dedicated connection, including construction of a tunnel, may be possible in the longer term.

Nevertheless, the potential exists for an interim rail access by way of a connection from the Eastern Creek site to the Main West Line, with freight operations occurring between passenger peak services and during night time hours.

While the provision of a wholly dedicated rail freight link from Eastern Creek to Port Botany may not be feasible for the present, we believe a large intermodal terminal must be provided in Western Sydney and that the site identified at Eastern Creek should be reserved for this purpose.

■ 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.

This Advisory Board accepts that, pending the construction of a dedicated rail freight link to Eastern Creek, much of the West's requirements will need to be serviced by road direct from Port Botany or using the M7 from intermodal terminals in Sydney's South Western corridor.

Intermodal Terminal Operating and Planning Principles

This Advisory Board expects a variety of different operational models will develop across the intermodal terminal network.

The existing stevedores are likely to turn their attention to intermodal terminal investment opportunities as natural extensions of their operations at Port Botany. Any future stevedoring entrant is likely to follow suit. This may well see both vertically integrated and common-user, open-access facilities developed.

This Advisory Board's strong view is that common-user, open access regimes at intermodal terminals must be encouraged.

■ 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.

A number of factors are critical to the economic and environmental success of new intermodal terminals. These are:

- A critical mass to offer economies of scale;
- Proximity to markets;
- Proximity to the rail and arterial road networks;
- Bundling of integrated, value-added services eg. empty container storage and Australian Quarantine and Inspection Service (AQIS)/Customs inspections;
- Maximising the use of fixed assets through 24/7 operations;
- Adequate buffering from residential areas.

All these considerations should guide the planning of new intermodal terminals.

In general, it is recommended the following principles be adopted to guide the Government in considering the development and operation of future intermodal terminals:



■ 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.

Transport Corridors

This Report has already outlined the obvious and substantial growth in rail volumes necessary to meet the 40 per cent rail freight target – from approximately 250,000 TEUs in 2004 to some 1.2 million TEUs by 2021.

Such dramatic increases in rail volumes cannot be achieved if rail freight movements are conducted in conflict with Sydney’s rail commuter services. We accept that commuter services must, of necessity, take precedence.

At present, there are curfews on the movement of freight services during the CityRail peak hour periods of 0600-0900 hours and 1400-1800 hours on weekdays. This means that freight trains on the shared network can only complete one or, at the very most, two cycles per day (i.e. return train trips per day).

Given the limitations caused by these curfews, it is important to ensure that sufficient infrastructure exists to “stage” trains, i.e. to position the trains ready to move on to the network shared with CityRail.

For rail to reduce its costs and be attractive, it should aim to complete four cycles per day. In the case of proposals at Enfield, five cycles per day may be possible.

Without the provision of dedicated rail freight connections and efficient above-rail operations, the intermodal strategy described in this report cannot succeed.

The Advisory Board notes that under agreements executed between the Commonwealth and the NSW Government, the Australian Rail Track Corporation will at a date to be set, take control of the Sydney Metropolitan Freight Network. This will include all the goods lines over which freight trains operate. The freight network will have two key elements:

- The existing dedicated freight line between Botany and Enfield; and
- A new Southern Sydney Freight Line.

RECOMMENDATION 14

It is recommended that:

- The Australian Rail Track Corporation take control of the Sydney Metropolitan Freight Network as soon as possible;
- RailCorp and the Australian Rail Track Corporation reach early agreement on operational issues to facilitate the above; and
- The Australian Rail Track Corporation assess the infrastructure requirements of the Sydney Metropolitan Freight Network including additional staging and passing loops.

Botany Freight Line (Port Botany to Enfield)

The Botany Freight Line is the primary point of direct rail entry and exit at Port Botany. Its amplification and the associated works to improve line efficiency are essential in achieving the 40 per cent rail freight target. It should be treated as critical infrastructure under the NSW planning laws.

Management by a single entity of this vital link is fundamental and will underpin the logistic improvements for operations of a metropolitan freight rail network.

Because of limited siding capacity at the Port Botany stevedoring terminals, trains arriving and departing Port Botany need to be broken into smaller trains. These operations occur within the nearby Botany Goods Yard which itself has siding limitations. The constant shunting and marshalling of trains means that 50 percent of the available track capacity to and from Port Botany is currently wasted.

It will be necessary to eliminate the constraints that currently exist at the Botany Goods Yard. This should include line separation between inward and outbound services, and sufficient storage capacity for staging trains into and out of the Port terminals. A Master Plan for the Botany Goods Yard needs to be prepared without further delay.

Current operating procedures on the Botany Freight Line involve a number of practices that impede the line's efficiency. They also involve unnecessary environmental impacts upon surrounding communities.

At General Holmes Drive, the existing road/rail level crossing involves freight trains stopping before proceeding through the crossing. This practice is incompatible with the essential requirements of an efficient freight rail system running trains pulling thousands of tonnes of freight.

This level crossing cannot continue to operate as volumes increase on the line. Safety and operational considerations make it imperative that the crossing be closed to road vehicles. Closure will need to be followed by grade separation with new road access between General Holmes Drive and Botany Road in the vicinity of Wentworth Avenue.

Similarly, the pedestrian crossing of the rail line at Banksia Street, Botany, necessitates every freight train sounding its horn on approach as a warning to local residents and children who use the at-grade crossing. Surrounding residents in medium density development along the rail line are forced to live with the noise impacts of each train warning of its approach

A pedestrian overpass at this location is long overdue and essential as volumes increase on this line.

It will also be highly desirable for noise attenuation barriers to be considered for installation along sections of the line in close proximity to residential development. Managing noise impacts of 24 hour a day operations will need very careful consideration in the environmental determination for the line's full duplication.



General Holmes Drive level crossing

Source: RailCorp

■ RECOMMENDATION 15

It is recommended that:

- The Botany Freight Line's "Stage Four" amplification be brought forward using AusLink funds;
- The corridor be protected to ensure that the Line can operate without long term capacity constraints;
- The NSW Government declare this project as critical infrastructure under NSW planning provisions;
- A Master Plan for the Botany Freight Line be prepared by the Port Botany Logistics Chain Team (see Recommendation 21);
- The vehicular level crossing at General Holmes Drive be closed without further delay. The NSW Government plan and construct a new road link under the freight rail line in the vicinity of Wentworth Ave;
- Funding for this project be available from the Freight Infrastructure Charge with the Roads and Traffic Authority including this project in its forward three year capital program;
- A pedestrian overpass be built over the Botany Freight Line at Banksia St, Botany, followed by the closure of the existing pedestrian level crossing;
- Funding for this project be available from the Freight Infrastructure Charge with RailCorp to include the project in its 2006-07 Budget capital works program; and
- Freight Infrastructure Charge funds be available for the construction of noise attenuation barriers along the Botany Freight Line, with their location to be determined in the approvals process.

Southern Sydney Freight Line (Beyond Enfield to Macarthur)

The Southern Sydney Freight Line is critical infrastructure, as it will provide a dedicated freight route between Sefton and Macarthur and connect to the Botany Freight Line. In conjunction with the Botany Freight Line, it will allow freight trains to operate between Port Botany and Macarthur on a line that is completely separate from Sydney's passenger train network.

The Australian Rail Track Corporation's design work for the Southern Sydney Freight Line is well advanced and the Advisory Board understands that it will seek the necessary planning approvals in coming months.

This project rates as perhaps the most important of all the rail freight projects in Australia. The intermodal strategy is dependant on its successful completion.

RECOMMENDATION 16

It is recommended that:

- The Australian Rail Track Corporation bring forward its investment in the Southern Sydney Freight Line;
- The NSW Government declare the Southern Sydney Freight Line as critical infrastructure under its new planning provisions;
- Final design of the Southern Sydney Freight Line incorporate a potential connection to a future Western Sydney Freight Line; and
- Freight Infrastructure Charge funds be available to assist with noise attenuation measures to the extent of any NSW Government liability.

Improving the road network

The Advisory Board has already included recommendations to address local road requirements in the vicinity of proposed intermodal terminals.

In respect of the broader arterial road network, it is acknowledged that achieving the 40 percent target will still involve substantial increases in the volume of freight transported to and from the Port by road. Unless there is a significant shift to rail, annual container truck volumes on the M5 are likely to increase by more than 150 percent by 2021. Even with a 40 percent rail share, container truck volumes on the M5 Motorway are projected to increase by approximately 75 percent.

Taking containers to the South West and eventually the West by rail will extend the life of the M5 and protect its ability to serve the needs of the wider motoring public. The M5 is already carrying traffic volumes far in excess of traffic predictions. The Advisory Board accepts that the M5 will eventually need amplification.

When it is undertaken, the Government will need to ensure that there is sufficient truck capacity in this corridor and carefully consider commercial vehicle user charges for the route.

It is our view that the same approach should apply in respect to future truck connections from the Port to the M4 Motorway.

RECOMMENDATION 17

It is recommended that:

- The timing of construction works to amplify the M5 and new road connections between the Port and the M4 take into account the Government's success in moving containers off road and onto rail; and
- In the interim, planning proceed for the provision of additional truck capacity in both these corridors.

Truck Tracking

The Government included in the Advisory Board's terms of reference for this study the need to consider the potential for truck tracking. Truck tracking involves the use of GPS and other technologies to monitor the movements of heavy vehicles.

The Advisory Board believes that truck tracking, when implemented, will be a major tool in managing the movement of trucks across the nation.

It has the potential for specific application in managing port-related truck movements.

It is our view that truck tracking as a tool will only succeed once the principle has been nationally accepted and the technology is available across the industry.

We think it appropriate that the Government revisit the issue of truck tracking once new nationally consistent arrangements have been implemented.

RECOMMENDATION 18

It is recommended that:

- The NSW Government pursue the implementation of a national truck tracking scheme in consultation with the industry; and
- The issue of tracking intermodal trucks be revisited as soon as these new nationally consistent arrangements are in place.

Port Botany's Future Development

Port Botany benefits as a result of its direct deep water approaches and its berthing depth. These features are very favourable when compared, for example, with Melbourne's Swanson dock, where the Melbourne Port Corporation faces significant environmental and other costs associated with major dredging to accommodate the next generation of larger container ships.

That said, competition between the three major east coast container ports is expected to grow in the years ahead.

Enhanced port /rail connections and interstate track improvements will be a feature in this competition.

Shipping line arrangements and the origin-destination of cargo will continue to influence decisions of importers and exporters when they choose the best port to handle their requirements.

At the end of the day, it will be trade and demand in the Sydney basin that drives the case for Port Botany and its future expansion.

At present, 85 percent of the containers handled at Port Botany are either generated from or destined for locations within a 40 km radius of Port Botany. This is likely to continue for the foreseeable future and makes the economic case for the expansion of Port Botany.

It would be prudent for the Port's final configuration to ensure that the future entry of a third competing stevedore is not compromised. With this in mind, the Port's Strategic Master Plan should provide in addition to the existing and already committed berths, at least three further berths, supported by effective and uncompromised dockside areas.

Eventually Port Botany will reach its limits in physical terms. The proximity of Sydney Airport's third runway imposes a final constraint on the Port's expansion.

Well before Port Botany reaches this point, the NSW Government will need to master plan alternative container port facilities at Newcastle. Land will need to be reserved at the Port of Newcastle for a container port facility and very significant investments in road and rail investment in the corridors between Newcastle and Sydney will be required.

■ RECOMMENDATION 19

It is recommended that:

- The continued expansion of Port Botany be strongly supported.

It is further recommended that the Port's Strategic Master Plan make provision for:

- The installation of weighbridges;
- Substantially improved onsite parking capacity for container freight trucks;
- Measures to end the present ad hoc arrangements for off site parking; and
- On site driver facilities including meeting and lunch facilities, as well as general amenities.

Stevedores

The efficient transfer of containers between each of the stevedores and road and rail transport is fundamental to ensuring Port Botany handles the forecast growth in volumes.

At present, stevedores are economically driven to deliver efficiency in the ship-to-shore exchange, but not to maximise the efficiency of landside infrastructure. In order to handle the increased volumes, the stevedores will need to undertake further investment and improve the efficiency of their road-port and rail-port interfaces.

A 40 percent rail mode share requires major changes to current rail operations at the Port. This will require a cooperative and coordinated approach with regard to future siding lengths, rail windows and handling rates.

Road freight in the off peak hours and increased two way loading can make a major contribution to increasing port efficiency and minimising congestion on the road network.

The Advisory Board expects the stevedores to work closely with the Sydney Ports Corporation to achieve the Government's 40 per cent rail freight share.

■ RECOMMENDATION 20

It is recommended that:

- Sydney Ports Corporation urgently seek agreement of the stevedores to ensure that state-of-the-art rail interfaces are available in respect of both Patrick's and P&O's operations.

It is recommended that these interfaces provide for:

- Capacity to receive, load and unload 600m push-pull unit trains;
- The consolidation of train cargo to single intermodal destinations; and
- Reduced turnaround times using dedicated rail handling equipment.

It is further recommended that the stevedores:

- Progress the implementation of both road and rail operations towards a 24 hours a day, seven days a week basis;
- Embrace a proactive and cooperative approach with the rest of the supply chain to maximise the chain's utilisation and efficiency; and
- In the pursuit of these goals, Sydney Ports Corporation be prepared, if necessary, to activate the Corporation's lease powers.

The Logistics Chain

The complexity of processing import and export containers needs to be more widely understood.

The chain presently encompasses two stevedores, over 20 shipping lines, over 250 road transport operators, six rail operators in the metropolitan area, four metropolitan intermodal operators, and over 1000 intermediaries and brokers in NSW dispatching shipments on behalf of firms and individuals.

This is aside from federal and state government agencies including Customs, the Australian Quarantine and Inspection Service, Sydney Ports Corporation and RailCorp, as well as the Australian Rail Track Corporation in the future.

It is to an extent dysfunctional, a fact compounded by participants not being required to understand – let alone improve – the supply chain beyond their own task.

The Advisory Board has had drawn to its attention ad hoc decision-making and its potential to impact on the freight chain.

Often there are instances where the stevedores make operational decisions with significant implications for other stakeholders.

Moves to relocate AQIS inspections off-site are a case in point.

These suggested arrangements have not been the subject of comprehensive planning and there appears limited capacity for AQIS's operational requirements to be satisfied within the container terminal given the design and operational requirements of the new gantries shortly to be installed by Patrick Limited.

A submission to the Advisory Board from the Sea Freight Council of NSW highlights the frustration of participants. It reads in part:

“Diverse container origin destination points combined with limited coordination among various industry stakeholders, promote a number of sub-optimal arrangements in the container supply chain:

- *While shipping lines (container controllers through either ownership or leasing arrangements) have contractual relationships with the stevedore, importer/exporter and container park, they tend to have limited relationships with container handlers along the land based chain*
- *Road, and to a lesser extent rail, transport operators often have only transactional relationships for single container movements, particularly at the low cost end of the market where transport is treated as a commodity*
- *Empty container parks are generally unaware of the origin or destination of containers released to or returned from shipping company customers, and*
- *Marine terminal operators, stevedores, did not need to understand the origin or destination of containers leaving or entering their premises.”*

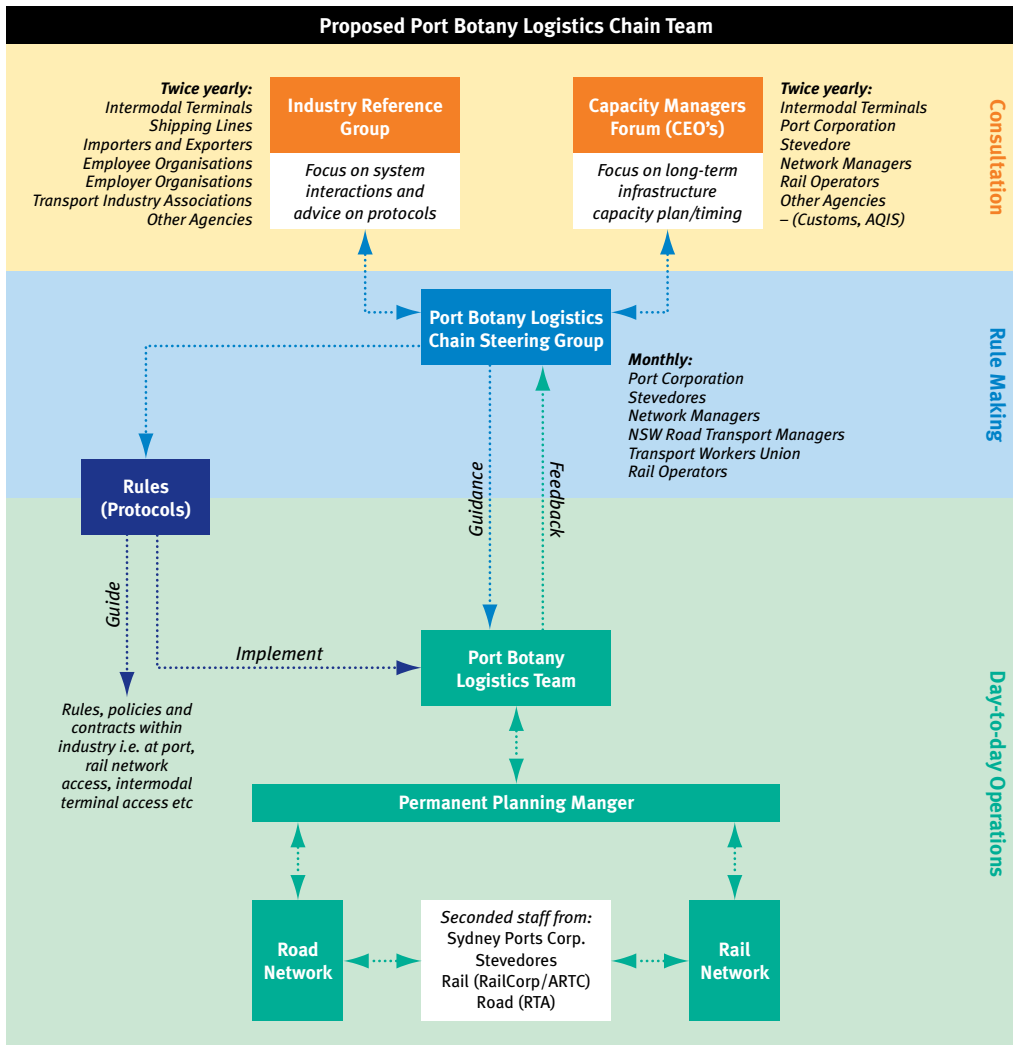
In other words, the system is bedevilled by simple and illogical flaws – such as the operating hours of intermodal terminals not aligning with access to the freight rail network.

The Advisory Board has examined the experience of the Hunter Valley Coal Chain Logistics Team. This team has brought industry participants together and dramatically improved the productivity of the coal chain. Even allowing for the substantial differences in product and the much more complex industry structure, the concept of a Logistics Chain Team for Port Botany has merit.

■ RECOMMENDATION 21

It is recommended that:

- A Port Botany Logistics Chain Team be established to manage the logistics task, to optimise the effectiveness of the port-rail-road interface and enhance capacity on the infrastructure network;
- The Team's Steering Group (see diagram) should be independently chaired;
- The Logistics Chain Team be responsible for setting best practice rules and terminal and train operating standards for the system;
- The Logistics Chain Team have the delegated authority to allocate train paths on the rail freight network and oversee improved utilisation of road movements in and out of the terminal, including management of off peak access and two-way loading;
- The Logistics Chain Team operate as a self-regulating body, subject to a review of its effectiveness after two years of operation;
- Alternative governance models be considered in the event of self regulation not proving successful; and
- ACCC approval be sought for the establishment and implementation of the Logistics Chain Team.



The Freight Infrastructure Charge

Investment in the container freight industry is currently demand-driven, and based on isolated sections of the logistics and transport network, rather than the system’s broad strategic requirements.


NSW requires pre-emptive investment in freight systems, facilities and transport corridors, with maximum private sector participation.

The Advisory Board was asked to consider a Freight Infrastructure Charge – specifically “the structure, amount, means of collection and economic impact of a possible port freight charge on containers moved by road to and from Port Botany”.

In considering the proposed Freight Infrastructure Charge, the Advisory Board considered the *PierPass* system which is being implemented at the ports of Los Angeles and Long Beach in California in the United States.

The *PierPass* system aims to provide cost incentives to remove trucks from the road during peak periods and to reduce congestion and pollution.

Under the system, all road cargo entering or exiting the ports will be subject to a Traffic Mitigation Fee. The fee is set at \$US40 per loaded TEU and \$US80 for larger containers and will be returned to terminal operators to offset the extra costs for off peak stevedoring services.



The fee is rebated on road cargo which moves through the terminal gates in off peak periods.

PierPass represents an innovative solution in changing behaviour in the logistics chain – in this case, breaking down the concentrated periods in which cargo is transferred through the ports.

In making its decision on any Charge, the NSW Government will need to have regard for the specific capital requirements and other expenditures necessary to help achieve the 40 percent rail mode share target.

This report recommends consideration of expenditure on a number of projects to achieve this end, including:

- Rail infrastructure connecting the intermodal terminals to the Port;
- Road infrastructure in the vicinity of the intermodal terminals;
- A new road underpass to replace the existing General Holmes Drive level crossing;
- Noise attenuation;
- Establishment and management of the Port Botany Logistics Chain Team;
- Workforce training and upskilling;
- The promotion of supply chain improvements to industry;
- Transitional modal demand strategies; and
- To the extent necessary to protect the intermodal terminal sites, initial acquisition of sites for development by the private sector.

Planning, design work and costing of individual projects will need to be undertaken by appropriate Government agencies, particularly RailCorp, Roads and Traffic Authority and the Department of Infrastructure, Planning and Natural Resources.

When this work is to hand, the Government will be in a position to determine the quantum of the Charge.

In considering a Freight Infrastructure Charge at Port Botany, the Advisory Board considered if such a Charge should be aimed at changing behaviour and redirecting mode share from road to rail, or alternatively at funding and enhancing intermodal capacity and rail network efficiency.

The Advisory Board obtained advice suggesting that, based on existing infrastructure, a Freight Infrastructure Charge of \$50 to \$70 per TEU might be required in order to change behaviour and shift mode share from road to rail. Although this proposition is certainly contestable, it is our clear preference to see any Charge set at a much lower figure.

A lower charge in combination with above-rail cost efficiencies flowing from the implementation of the recommendations in this report can deliver a similar, if not greater, differential.

Analysis undertaken by the Department of Infrastructure, Planning and Natural Resources indicates that increasing the number of train cycles, introducing longer trains and improving turnaround times at the Port are likely to yield cost savings of at least \$40 per TEU.

It is the Advisory Board's view that a Charge of around \$30 per TEU is unlikely to erode NSW's competitiveness. The Charge would be applied in the context of total import costs and the average value of import container contents, presently estimated at over \$40,000 per container.

The Charge has the potential to fund a significant program of infrastructure and other expenditure without recourse to the State's general revenues.

The Department of Infrastructure, Planning and Natural Resources has undertaken financial modelling which concludes that, after allowing for the rebates proposed below, a Charge of \$30 per TEU has the potential to fund a program in current terms of approximately \$375 million (at a 7 percent discount rate). This sum is sufficient to implement the recommendations in this report, including, if necessary, for the State to acquire the sites at Moorebank and Eastern Creek as outlined in Recommendations 4 and 9. The valuations used for these calculations have been provided by the Department of Commerce.

Significant benefits will certainly flow from the freight chain investments this strategy proposes for funding from the proceeds of the Charge.

On the other hand, significant penalties will attach to not funding this report's recommendations. These will include road construction costs, environmental costs and transport congestions costs.

It is the Advisory Board's strong view that revenues derived from the proposed Charge should be hypothecated to a dedicated fund and only be spent on delivering elements of this intermodal strategy.

The Advisory Board cannot recommend any Charge which is not hypothecated and guaranteed for spending on the intermodal freight chain.

The Advisory Board has examined two mechanisms for the collection of the Freight Infrastructure Charge.

The first mechanism proposed that the Sydney Ports Corporation add the Charge to the wharfage invoice imposed on shipping lines. The Charge would subsequently be passed on by shipping lines to importers and exporters.

The second mechanism proposed that a bureau collect the Charge. The Advisory Board is aware of private sector development of such bureaus including 1-Stop and MaxeTrade. These bureaus are seeking to provide an IT framework facilitating the electronic processing of documentation between supply chain participants.

The Advisory Board believes that any proposed collection mechanism should be simple, transparent to industry, and accountable to the Government and the public. It is the Advisory Board's view that the collection of any charge should be undertaken by the Sydney Ports Corporation.

The Advisory Board proposes that the Charge be imposed on all containers and rebated in full for containers hauled by rail.

The Advisory Board believes that there is scope to make better use of the road network to move containers during night time off peak hours. To encourage this, the Advisory Board proposes that, in addition to the rebate for containers carried by rail, the Freight Infrastructure Charge be rebated in full for containers moved by road during designated night-time off-peak hours. This road rebate will send a modest price signal to the market with an aim of relieving pressure on the arterial road network during peak hours.

In considering the best structure to administer the Freight Infrastructure Charge, minimal bureaucracy and maximum reliance on existing Government resources is desirable. The Advisory Board has taken legal advice as to the best structure and concluded that a simple corporation sole administered through the Department of Infrastructure, Planning and Natural Resources should be recommended. Other such corporations administered through Government agencies exist under a number of State statutes. Taking into account its planning role and its multimodal mandate, Department of Infrastructure, Planning and Natural Resources is the appropriate entity to perform this function.

**■ RECOMMENDATION 22**

It is recommended that:

- The Government legislate for a Freight Movements Management Act to give effect to the Freight Infrastructure Charge;
- The Government consider a Charge set at \$30 per TEU, collected on all import and export containers;
- The Charge be fully rebated for;
 - Containers carried to or from the Port by rail; and
 - Containers carried to or from the Port by road during designated night-time off peak hours.
- Sydney Ports Corporation collect and rebate the Charge;
- Proceeds from the Charge be deposited into a Freight Movements Management Fund to be held and administered by the Director General of the Department of Infrastructure, Planning and Natural Resources, constituted as a statutory corporation;
- The statutory corporation administering the Fund be constituted with power to acquire land, commission research and make funds available for capital and other projects;
- The Fund have the power to borrow and in particular to securitise future revenues from the Charge;
- Revenue from the Charge be hypothecated and only expended on projects and initiatives linked to this intermodal strategy;
- After two years' operation, the Charge be subject to a review process, involving industry, and reported to the NSW Parliament;
- The statutory corporation be required to consult with such bodies or persons as the Minister for Infrastructure and Planning directs from time to time; and
- The personnel and other resources to administer the Fund be provided by the Department of Infrastructure, Planning and Natural Resources.

Industry training initiatives

The Advisory Board recognises the changes recommended in this report will require improvements in existing work practices for container truck drivers and locomotive engineers.

We are of the view that a program to improve industry understanding and training, up skilling of drivers, and greater emphasis on security and responsibility would afford valuable support as the State rolls out its intermodal program.

■ RECOMMENDATION 23

It is recommended that:

- The NSW Government consider providing support for programs that lift the skills of drivers;
- Occupational Health and Safety (OH&S) Act provisions be pursued through appropriate security and safety training;
- The Government promote the up skilling of drivers, both rail and road, to service the new transport network logistics chain and intermodal terminals; and
- Support from the Fund be available for registered employer/employee organisations in the pursuit of these initiatives.

Other Issues

During its investigations and consultative process, the Advisory Board received a number of submissions relating to issues outside the scope of its terms of reference. We have taken the opportunity of pursuing the resolution of these issues through the relevant ministries.



Appendix A – Membership of the Advisory Board

Hon. Laurie Brereton Chairman, Freight Infrastructure Advisory Board

Paul Forward Chief Executive Officer, Roads and Traffic Authority

Vince Graham Chief Executive Officer, RailCorp

Lisa Hunt NSW & Queensland General Manager, Transurban

Greg Martin Chief Executive Officer, Sydney Ports Corporation

Neil Matthews Director, Strategic Design + Development

Mal Peters President (to 21 July 2005), NSW Farmers Association

Llew Russell Chief Executive Officer, Shipping Australia

Tony Sheldon NSW Branch Secretary, Transport Workers Union

Jennifer Westacott Director General, Department of Infrastructure, Planning and Natural Resources

Appendix B – Parties that made Submissions to the Advisory Board

The Freight Infrastructure Advisory Board received submissions from the following parties:

<i>Organisation</i>	<i>Contact</i>
Australian Customs Service	Mr Graeme Charlwood
Australian Meat Industry Council	Mr Stephen Martyn
Chartered Institute of Logistics and Transport Australia (CILTA)	Mr Len Harper
Coles Myer	Mr Andrew Potter
Container Logistics Action Group	Mr Martin Feil
CRT Group	Mr Colin Rees
CRT Group	Mr John McNamara
Department of Environment and Conservation	Mr Joe Woodward
Donaldson Coal	Mr Brendan McPherson
Economia PDS (Sydney Railport Facility)	Mr Remo Nogarotto
Greater Western Sydney Economic Development Board	Mr Bob Germaine
Individual	Ms Helen Hamilton
Individual	Mr Warren Symons
Individual	Mr John Hopman
Macarthur Intermodal Shipping Terminal	Mr Greg Heraghty
Maritime Container Services	Mr Grahame Wright
Member for Strathfield	Ms Virginia Judge, MP
Menangle Action Group	Mr Jason Terry
Newcastle Port Corporation	Mr Colin Norman
NSW Road Transport Association	Mr Hugh McMaster
P&O Ports	Mr Tim Blood
Pacific National	Mr Chris McArthur
Patrick Corporation	Mr Christopher Corrigan
Port Kembla Pollution Meeting	Ms Helen Hamilton
Port Kembla Port Corporation	Mr Dom Figliomeni
Property Council of Australia	Mr Ken Morrison
Pymont Raw Materials Pty Ltd	Mr Tony Ellis
QR National	Mr Clive Oldfield
Sada Services Pty Ltd	Mr Mark Brackenbury
Sea Freight Council of NSW Inc	Mr David Baker
Shipping Australia Ltd	Mr Steve Horton
Transport Workers Union	Mr Scott Connolly

