



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Brighton Transport Hub Project

Presented to His Excellency the Governor pursuant to the provisions of the Public Works Committee Act 1914.

MEMBERS OF THE COMMITTEE

Legislative Council

Mr *Harriss* (Chairman)
Mr *Hall*

House of Assembly

Mr *Best*
Mr *Green*
Mrs *Napier*

TABLE OF CONTENTS

INTRODUCTION	3
BACKGROUND	3
<i>Industrial Land</i>	4
<i>Road Freight Link With Hobart</i>	4
<i>Hobart Port</i>	5
<i>Rail</i>	5
<i>Freight Growth</i>	5
<i>An Integrated Efficient Responsive Transport System</i>	5
<i>Project Location</i>	6
<i>Project Objectives</i>	6
The Existing Situation.....	6
<i>Quality of Facility and Level of Existing Service</i>	6
<i>Current Track Speed, Turnaround Times and Load Capacity</i>	7
<i>Improvements to Running Times</i>	7
<i>Current Use of the Macquarie Point Site</i>	7
<i>Due Diligence and Approvals</i>	8
THE PROJECT	8
<i>Introduction</i>	8
<i>Core Activities</i>	8
<i>Value-Adding Activities</i>	9
THE PROPOSED WORKS	9
<i>Bulk Earthworks to Create A Level Site</i>	10
<i>Site Drainage</i>	10
<i>Rail Construction</i>	10
<i>Freight Handling Platform</i>	10
<i>Road Construction</i>	10
<i>Works Excluded</i>	10
<i>Procurement</i>	10
<i>Links with Other Projects</i>	11
<i>Management of the Hub</i>	11
ENVIRONMENTAL AND SOCIAL IMPLICATIONS.....	11
<i>Environmental Implications</i>	11

<i>Aboriginal Cultural Heritage</i>	11
<i>European Cultural Heritage</i>	12
<i>Flora and Fauna</i>	12
<i>Noise Impacts</i>	13
<i>Environmental Externalities</i>	13
SOCIAL IMPLICATIONS	14
<i>Social Assessment</i>	14
<i>Residential Property Impacts</i>	14
<i>Business Property Impacts</i>	15
<i>Planning Approvals</i>	15
<i>State Policies</i>	15
<i>Anticipated Transport Impacts</i>	16
<i>Land Acquisition</i>	16
INDUSTRY CONSULTATION ON LAYOUT, OPERATION AND DESIGN	17
PUBLIC CONSULTATION	18
<i>Overview</i>	18
<i>Web-Based Communications Program</i>	18
<i>Consultation Undertaken</i>	18
ESTIMATED COST.....	20
<i>Impact on Consolidated Account</i>	21
<i>Project Funding</i>	21
PROJECT BENEFITS	22
<i>Economic Gains from Infrastructure Spending</i>	22
EVIDENCE.....	25
DOCUMENTS TAKEN INTO EVIDENCE.....	36
CONCLUSION AND RECOMMENDATION.....	37

INTRODUCTION

To His Excellency the Honourable Peter George Underwood, Officer of the Order of Australia, Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposal: -

Brighton Transport Hub Project

and now has the honour to present the Report to Your Excellency in accordance with the *Public Works Committee Act 1914*.

BACKGROUND

Transport Hubs

The land transport system within Tasmania is critical to its people and its economy, with the proportion of international exports in Tasmania's Gross State Product being the second highest in Australia. The forecast increase in container traffic across Bass Strait, together with a significant increase in north-south freight, will increase demands for improved transport infrastructure.

The Department of Infrastructure, Energy and Resources (DIER) first assessed the need for a southern transport hub around ten years ago. The demand for construction of transport hubs which can provide the necessary economies of scale and scope, and also accommodate the rapid anticipated increase in the freight task, is occurring throughout Australia. Road and rail line haul operators are seeking to increase productivity by increasing carrying capacity and transport hubs support these efficiencies. State Governments around Australia have encouraged the construction of transport hubs on urban fringes to improve transport efficiency and reduce urban congestion.

Transport hubs involve the transfer of goods and materials from one type of transport to another, this could be from:-

- (i) road vehicle to road vehicle (e.g. B-Double truck to smaller distribution vehicles)
- (ii) road to rail (e.g. container on an articulated truck to rail)
- (iii) rail to road, or
- (iv) rail or road to ship.

They can also provide facilities for packing/unpacking of containers for distribution.

Transport hubs also provide economic and environmental benefits by lowering the transfer costs between road and rail and encouraging increased rail freight transport.

The majority of southern Tasmania's inter-regional freight tasks involve line haul road or rail transport through the northern ports. In terms of total costs to users, the line haul component is generally the largest element of cost and hence the area where there is the greatest scope for efficiencies to be gained.

These underlying industry dynamics are placing increased demands for nodes where the inter-regional freight task is transferred to local distribution systems.

The Changing Transport Landscape

The changing needs of the transport and warehousing industries have an impact on industrial land supply and transport routes. The development of policies and strategies that maintain and optimize freight efficiency in the context of a growing freight task and potential changes in the composition of this task is a key issue into the future.

Industrial Land

DIER'S Southern Integrated Transport Plan Background Report¹ notes that the transport, storage and logistics industry is set to expand, with freight movements predicted to double over the next 20 years. These industries are expected to become bigger users of industrial land and there is increasing pressure for these activities to take place on industrial land – primarily because the land is cheaper and requires larger lot sizes.

- Derwent Park has approximately 100 ha of highly fragmented light industrial and service industry land, most of which is presently developed and where further redevelopment is restricted by surrounding residential land uses. The Glenorchy City Council has therefore implemented a strategy to encourage infill development of light industry rather than transport, storage and warehousing businesses which require larger lot sizes.
- Strategies implemented by the Brighton Council for industrial development have included the active encouragement of relocation of building, construction, agricultural and transport industry sectors. The Brighton Council has also planned to develop the Bridgewater/Brighton industrial area as a transport hub as a consequence of its proximity to road and rail access to the northern ports.

Road Freight Link With Hobart

The Brooker Highway links key freight distribution and warehousing areas in the Glenorchy municipality, including Derwent Park and Glenorchy, and provides the major link between the Southern Region and the Midland Highway to the northern ports. In terms of private transport, the highway is a significant commuter route,

¹ DIER, Southern Integrated Transport Plan Background Report, November 2006

carrying higher daily volumes than the Southern Outlet, and provides the main north-south linkage through and within the Greater Hobart area. The northern end of the Brooker Highway is relatively free flowing and is designed to accommodate increasing traffic while the southern end is more congested.

Hobart Port

Historically the Port of Hobart was the main trading port for southern Tasmania. Over the past two decades, the port's throughput has significantly declined, while the freight task between southern Tasmania and the northern ports has continued to increase. This shift has significant implications for transport infrastructure.

Rail

Rail freight has advantages for long distance, heavy freight, particularly for origins and destinations at or near railheads, while road freight is better suited for dispersed origins and destinations, just-in-time deliveries, small loads and shorter journeys. Rail is particularly important for the movement of containers between the ports of Burnie, Devonport, Bell Bay and southern Tasmania, and for the bulk movement of coal, cement and minerals.

Until recently, rail retained customers and freight traffic, despite the deterioration in the level of service. The rail upgrade package funded by Auslink, which is currently under way, will initiate an improvement in reliability and cost reduction. Road transport is expected to continue to dominate the short distance and general freight transport markets. However, with improvements in infrastructure, intermodal terminals and rolling stock, rail has the potential to substantially improve its competitive position in contestable markets, such as movements between northern ports and southern Tasmania.

Freight Growth

From 2000 to 2006 Tasmania's container freight grew at 10.5% per annum, but even with a more conservative 6% container growth, Tasmania would experience a doubling of container freight between 2006 and 2017. Also indicators point to a significant increase in freight into, out and within Tasmania over the next decade.

An Integrated Efficient Responsive Transport System

The transport system must respond to the changing transport landscape and transport planners must plan well ahead. The Brighton Transport Hub is an integral part of a statewide plan to facilitate efficient management of freight. It is the southern hub that allows the movement of freight between southern Tasmania and northern hubs (ports). The Brighton Transport Hub will play a pivotal role in the transport chain.

The Hub will provide a point for consolidation and deconsolidation of freight and will be an important facility for truck loading/unloading as well as rail.

Project Location

The site for the new intermodal transport hub is within the Brighton Municipality to the west of the existing Brighton Industrial Estate. This site was approved by Government after an exhaustive assessment process which involved:

- Development of functional specifications which were then used to develop criteria to assess suitable locations
- An investigation of all land within 40 kms of Hobart which short-listed seven possible locations for assessment
- Extensive due diligence of two short-listed alternative sites
- Final site selection.

Project Objectives

The primary objectives for the project are:

- To develop contemporary ‘fit-for-purpose’ intermodal facilities in a new location that will underpin sustained productivity improvements in transport and encourage growth in rail transport share; and
- To develop an effective long term transport hub for Southern Tasmania’s road/road and rail/road interregional freight.

The Existing Situation

Quality of Facility and Level of Existing Service

The current transport facility at Macquarie Point is adjacent to a rapidly emerging residential/tourist precinct, and is close to the Hobart CBD. It is old, ill equipped for handling the size and types of today’s freight trains, and lacks the necessary room for expansion or site reconfiguration. It features many short holding tracks that prevent trains being moved as a single continuous vehicle, resulting in extensive shunting throughout loading operations. These delays occur in addition to long travel times south of Bridgewater, where the track follows the Derwent River through Hobart’s northern suburbs and across 21 level crossings which require very low train speeds to minimize the risk of incidents at these sites.

The Macquarie Point site features a poor quality surface with uneven levels which creates difficulties for the loading, unloading and manoeuvring of freight across the site. The site configuration does not allow for efficient truck consolidation and deconsolidation and adds to the delays borne by transport companies waiting for containers to be unloaded.

Management and security is also difficult because of numerous entry points and the poor rail layout.

In modern day planning terms, a transport facility located in the city centre is inappropriate. Its location also compounds traffic problems through focusing heavy transport vehicle movements on the most congested section of the Brooker Highway between Evans Street and Derwent Park Road.

Current Track Speed, Turnaround Times and Load Capacity

The most significant factors inhibiting rail’s ability to increase freight market share between Hobart and the northern ports are the 48 hours turn around time between Hobart and Burnie and the limited load capacity caused by Tasmania’s topography, with its steep gradients and tight curves.

Despite average train lengths of 500m to 650m into the Macquarie Point hub, the maximum length that can be accommodated on any one of the 5 rail lines is only 250m. It is estimated that the shunting task at Macquarie Point can add between three and four hours to each trip. When added to the combination of short line haul distances, low average running speed, the need to attach and detach freight en-route, and the limitations of a single line network with relatively few passing opportunities, the best timeframe that a set of locomotives can cycle Burnie to Hobart and return is approximately 32 hours.

Improvements to Running Times

SRG Pty Ltd² in its report on opportunities to improve the efficiency of the Tasmanian rail network has estimated that the following improvements can be made in the return cycle to the northern ports if the Hub is moved to Brighton.

Change Strategy	Time saving per return trip
Travel time	80 minutes
Shunting on arrival/departure at Macquarie Point	20 minutes
In terminal refueling and provisioning	120 minutes
Terminal operations simplification	60 minutes
Total estimated time saving	4 hours 40 minutes

Planned expenditure on rail infrastructure will lead to further reductions in turnaround time which will in turn improve competitiveness for rail.

Current Use of the Macquarie Point Site

The major users of rail at Macquarie Point are heavy industry in the northern suburbs, who cart material between their respective sites and Macquarie Point using the Brooker Highway. An example of the inefficiencies of the current rail-road logistics task undertaken on the site is the transport of zinc ingots from Nyrstar. The ingots are loaded onto pallets at the factory site at Lutana and transported along the Brooker Highway to the Hobart facility using a fleet of B-doubles. The pallets are then containerized, moved by truck to a storage point at Macquarie Point and at a later time are loaded onto rail for transport north for export via the ports at Burnie and Bell Bay.

² SRG Pty Ltd, Tasmanian Rail Infrastructure, Opportunities to Improve the Efficiency of the Tasmanian Rail Network, December 2006

The 2005/06 freight demander survey undertaken by DIER shows that a total of 1,013,808 tonnes of freight is transported by rail each year which is broken down as follows:

- The total North-South 2005/06 rail task is 442,434 tonnes.
- The total South-North 2005/06 rail task is 571,374 tonnes.

Not all of the freight task summarized above is directed through Macquarie Point, for example the transport of pulp and paper is via Boyer.

The total freight transported by **road and rail** through Macquarie Point is around 680,000 tonnes pa of which 500,000 tonnes pa is transported by rail.

Pacific National Tasmania (PNT) handles approximately 12% of the State's total freight transport task. Freight through Macquarie point is part of this total task.

PNT operates two trains a day heading north – one to Burnie and one to Bell Bay. Two trains arrive into Macquarie Point each day from Burnie.

Toll Tasmania undertakes approximately 90-95% of the rail-road freight task.

Due Diligence and Approvals

DIER was requested by Government to undertake planning to assess the implications of relocating the existing transport facilities from Macquarie Point. The transport benefits from construction of a new transport hub which will provide increased operational efficiencies are significant. In addition, vacating Macquarie Point frees up a prime development site.

In November 2007 the Commonwealth Government approved funding of \$57M and the Tasmanian Government approved funding of \$23M for the Hub.

The Government approved the preferred site on 25 August 2008.

THE PROJECT

Introduction

Transport Hubs can incorporate a minimum of core facilities or expanded and complementary facilities that increase synergies for business. The Brighton Transport Hub is being planned to be capable of providing a range of core activities, complemented by value-adding activities. This means that additional land area will be required surrounding the actual track and transfer area to support the Hub's viability.

Core Activities

The core services offered by an intermodal transport hub can be defined as including:

- Provision of a rail siding, spur or loop
- Provision of road access for trucks carrying containers

- Provision of working areas to allow containers and/or units to be removed from or loaded out to rail wagons
- Provision of hardstand for short term storage of containers
- Provision and operation of the lifting equipment
- Management of both hard and soft infrastructure to facilitate the seamless movement of goods and containers through the facility.

Value-Adding Activities

Land will be available at the Brighton Transport Hub for value adding activities. Deriving revenue from complementary activities may be crucial for the operational viability of intermodal transport hubs and can include:

- Import/export facilitation and bonded facilities
- Warehousing and storage
- Road-to-road cross-docking
- Empty container storage
- Wash, repair and preparation of containers
- Temperature and modified/controlled atmospheres
- Industry parks/cluster developments
- Truck parking and maintenance.

The take up of these or other activities will be a decision for the Hub Manager based on commercial considerations.

THE PROPOSED WORKS

The proposed works are the construction of a new intermodal transport hub at Brighton. Detailed design and site master planning work for the hub and associated industrial subdivision has commenced following determination of the preferred site in August 2008, and will generally provide for:

- Freight capacity for 100,000 TEU (Twenty Foot Equivalent Units or Containers) per annum, rising to a forecast 400,000 TEU per annum in 2030, and an ability to store containers in close proximity to rail hardstand.
- B-Double standard access to warehousing and hardstand.
- Parking for trucks, trailers and employee vehicles.
- Relocation of the cool store from Macquarie Point.
- Space for construction of offices and amenities in close proximity.
- Additional land available adjacent to the Hub for development of transport related warehousing, other required facilities and general light industrial use.

A separate bulk goods train facility will be allowed for at Rogerville. This is in close proximity to the main Hub site but not immediately adjacent.

The scope of works provides for the following:

Bulk Earthworks to Create A Level Site

As a consequence of the topography of the site, approximately 750,000 cubic metres of soil will need to be moved to create a level site approximately 1,200m long and 250m wide. Of this, approximately 200,000 cubic metres will be excess to requirements and will be utilized by the Brighton Bypass works, thus achieving cost and environmental efficiencies for the State.

Site Drainage

Drainage of such a large flat area will require an extensive network of grated pits and pipes. Site runoff will increase significantly compared with the existing landform. The downstream impact of this increased runoff will be mitigated by the construction of stormwater detention basins at the northern end of the site. Interception systems that collect pollutants will also be incorporated into the drainage system.

Rail Construction

Approximately 3.2km of new rail line will be required, including sidings for loading and unloading, rail loops and shunting facilities.

Construction of new rail access into the Hub site from the north will also be provided by way of a new spur line from the main north-south line.

Freight Handling Platform

Stage 1 will incorporate a minimum length of 380m of hardstand. The ultimate design will provide for an additional 400m of hardstand to be constructed as freight requirements grow.

The hardstand will comprise a heavy duty asphalt or concrete pavement with sufficient width to enable special purpose equipment such as top lift fork trucks or reach stackers to load and unload freight and transfer it to storage areas. For a limited number of users direct access from the hardstand area to adjacent warehouses will also be provided.

Road Construction

Construction of a ring road around the Hub designed to ensure developable land remains available for future use. Connection of the ring road into the road network at the northern and southern ends of the site is to be constructed by DIER as part of the Brighton Bypass works.

Works Excluded

It is important to note that the project does not include the road access arrangements at the north and south of the Hub site. These accesses are being undertaken as part of the Brighton Bypass Project.

Procurement

The delivery of work packages will be managed by DIER. The proposed contracting strategy is through an Early Contractor Involvement (ECI) model. The objective of

the ECI process is to ensure that a start is made on bulk earthworks not later than 31 March 2009 and to maximize opportunities to source surplus excavated material from the Hub project and utilize it for construction of the Brighton Bypass, providing substantial cost savings for Government, which will be quantified when detailed design has occurred.

Links with Other Projects

The proposed development of the Brighton Transport Hub has provided the impetus for earlier commencement of the Brighton Bypass works as a consequence of the need for construction of an interchange to access the north of the site.

It has also provided the impetus for bringing forward sections of already planned realignment of rail to improve gradients and curves.

Management of the Hub

There are a range of management approaches in place at Hubs in other States. The Manager of the Hub will be determined through a competitive selection process, which will ensure that the most appropriate management arrangement, which is in the best interests of the Tasmanian community, is put in place.

ENVIRONMENTAL AND SOCIAL IMPLICATIONS

Environmental Implications

The proposed site for the Hub is located adjacent to a Category 1 highway and an existing and rapidly expanding industrial estate. Importantly, the site is centrally located within an environmental buffer overlay, which provides significant separation from residential development and provides certainty for growth of industrial uses in the long term. This is in accord with Government's key strategies of:

- Planning for future industrial land needs to be closely linked to the location of strategic transport infrastructure and networks including road and rail;
- Planning for industrial areas and freight generating business needs to be regionally based and incorporate the principles of integrated land use transport planning;
- Identification and reservation of land for industrial purposes.

It is expected that future industrial development proposed for the site will be in keeping with the evolving character of the area and will form the outer limit to the northwest of the long term footprint of the industrial precinct.

Aboriginal Cultural Heritage

Aboriginal cultural heritage assessments have been undertaken across the site and three artefact scatters were identified. Whilst a review of the design in order to minimize impact on these sites has avoided one of the sites, two will be impacted to some degree by the proposed Hub footprint. The full context of the sites and the likelihood of subsurface artefacts is, as yet, not fully understood. Accordingly,

representatives from both the Tasmanian Aboriginal Land and Sea Council and the Aboriginal Heritage Office of the Department of Environment Parks Heritage and the Arts have expressed the need for further investigations as they believe a greater understanding of all of the sites west of the industrial estate will enhance the Aboriginal community's knowledge of the values associated with the Bridgewater and Jordan River area. DIER has consulted extensively with the Aboriginal community and with the State Regulator on these issues and is undertaking all necessary investigations to assist in this regard.

The Minister for Environment, Parks, Heritage and the Arts has granted DIER a permit to undertake archaeological investigations.

Following the subsurface archaeological investigations and reporting, an application for a permit to destroy, cover or relocate relics will be submitted to the Minister to enable construction to proceed.

European Cultural Heritage

A thorough historic heritage assessment has been undertaken across the site. There are no places currently included in the National Heritage List, on the Tasmanian Heritage Register or in the Heritage Schedule of the Brighton Planning Scheme.

However, there are a number of sites that are associated with the transformation of the pre-European landscape into an agrarian landscape.

The most common features encountered were sites comprising stone mounds and historic boundary demarcations that relate to early grant boundaries. These features will be impacted by construction of Hub infrastructure and will be fully documented prior to commencement of works.

Remnants of foundations of a site hut constructed between 1810 and 1830 and traces of an early 1810 to 1830 road were also identified and will require further investigation and detailed recording prior to construction of the Hub.

Flora and Fauna

Comprehensive vegetation surveys and a fauna habitat assessment have been undertaken.

Significant flora values were identified at one location at the northeast of the site.

Additionally, several Commonwealth and State listed threatened flora species and potential habitat for listed fauna species were identified across the remainder of the site.

One flora species listed at both a State *Threatened Species Protection Act 1995* (TSPA) and Federal *Environment Protection Biodiversity Conservation Act 1999* (EPBC) will be directly impacted by the development of the site. A referral in regard to the direct impact on this species and potential indirect impacts on other EPBC listed flora and fauna and species has been made to the Australian Government Department of the Environment, Water, Heritage and the Arts.

A further summer survey is required to determine the extent of threatened grass species which are only listed under the Tasmanian TSPA. The survey will also determine whether a threatened skink species is present at the site.

Application for a permit to take the affected flora and fauna under the TSPA will be made after the summer survey.

There will be extensive, sensitive and appropriate landscaping undertaken at the site.

Noise Impacts

The proposed transport hub will be a 24/7 operation and will be developed along with various associated industrial and transport related activities over the longer term.

The site was selected with the above operational requirements in mind. It is located well within an environmental buffer overlay which provides a significant distance between industrial and residential uses. The overlay prevents encroachment of residential uses and provides long term operational security for industrial land users.

Energy Efficiency

Rail is the safest and most environmentally friendly form of land transport. Per tonne of freight hauled, rail requires less than one third of the fuel of road transport. New record high oil prices have emerged in recent years and consequently the need to move freight in more fuel-efficient ways has become more imperative than ever.

Rail is still more energy efficient than road, even when the “full fuel cycle” is considered (taking into account fuel use from all aspects of the transport task including line haul, pickup and delivery and energy production and distribution). Even the biggest and heaviest trucks – triple road trains weighing 124.5 tonnes – are nearly 50% more energy intensive than rail on a full fuel cycle basis.

Carbon Footprint

Australian ranks 16th among major greenhouse gas producing nations, but has the highest emissions per capita in the world and has the fourth highest greenhouse gas emissions per capita from transport in the world. This stems from Australia’s reliance on road transport, with the highest volume of road freight per capita in the world (*Austroads 1997*). By 2020, greenhouse gas emissions from articulated trucks are expected to increase 54% while non-electric rail freight emissions are projected to increase 28% (mostly freight)(*Greenhouse Gas Emissions from Australian Transport, BTRE Report*)

Environmental Externalities

Transfer of freight from road to rail has considerable positive impacts in terms of environmental pollution. The impacts have been modeled by Maunsell in its 2005 report³ (using Net Tonne Kilometres) as:

³ Maunsell Australia Pty Ltd, Assessment of Financial and Economic Impacts from the Transfer of Freight from Rail to Road, November 2005

Air pollution costs (January 2005 prices):

Road – Heavy vehicles (urban areas)	0.95 cents per net t km
Road – Heavy vehicles (rural areas)	0.004 cents per net t km
Rail – (urban areas)	0.328 cents per net t km
Rail – (rural areas)	0.001 cents per net t km

Greenhouse gas emission (January 2005 prices):

Road – Heavy vehicles	0.077 cents per net t km
Rail	0.033 cents per net t km

Noise pollution costs in urban areas (January 2005 prices):

Road – Heavy vehicles	0.252 cents per net t km
Rail	0.136 cents per net t km

Water pollution costs in urban areas (January 2005 prices):

Road – Heavy vehicles	0.011 cents per net t km
Rail	0.005 cents per net t km

The advantages in a mode shift from road to rail are clearly demonstrated in the above pollution costs.

SOCIAL IMPLICATIONS

Social Assessment

The Brighton Municipality is positioned on the Midland Highway, the major north-south Tasmanian access route. It is ideally positioned to capitalize on any increase in activity associated with additional industrial land supply and new transport infrastructure.

The nearby urban settlements of Brighton, Bridgewater and Gagebrook have a higher proportion of people involved in trades and labour employment than Tasmania as a whole, and this is an added benefit to industrial growth in the Municipality.

Given that existing businesses draw a significant percentage of employees from the local area, increased employment opportunities are likely to result, with positive impacts on the level of social disadvantage in the community. These positive effects can extend into neighbouring municipalities, which in Brighton's case can provide beneficial outcomes for surrounding areas with declining populations such as the Central Highlands.

Residential Property Impacts

There are a small number of residences that have been constructed within the already existing environmental buffer overlay. Noise modeling has been undertaken which indicates there is potential for these properties to be negatively impacted by increased background noise levels resulting from 24 hour operations of the Hub. Residences are not permitted in this area unless there are existing use rights (ie they were constructed prior to establishment of the buffer). Discussions have been held with the affected landowners and further noise modeling is being undertaken on their properties.

There will also be visual impacts for some properties.

Once these issues are more clearly understood, a range of mitigation measures will be considered, including responsive hub design, double glazing, landscaping and screening. Every effort will be made to minimize the impact of the Hub on these residences.

Stringent planning scheme controls prohibit new sensitive land uses in land areas adjacent to the Hub.

Business Property Impacts

SGS (2008)⁴ reports that recent and strong population growth of Greater Hobart will place greater pressure on existing small scale industries currently located in Hobart and Glenorchy from residential encroachment and expansion of retail and services. This is particularly true for transport and distribution firms who suffer from an inability to operate on a 24 hour basis if their facilities are surrounded by residential housing.

Benefits that will accrue to local businesses include improved access for B-Double trucks and additional access into the existing industrial estate. Property values are also likely to increase as a consequence of their location adjacent to the new Hub.

The negative impacts presently identified relate to construction works associated with the Hub. Traffic management and dust control management plans will be prepared to ensure that the effects upon local businesses are minimized.

Planning Approvals

A development application is required for the proposed works and will be submitted to the Brighton Council for approval. Successful passage through this process will facilitate commencement of construction.

State Policies

State Policy on the Protection of Agricultural Land

The State Policy on the Protection of Agricultural Land 2000 provides for protection of the State's prime agricultural land from conversion to non-agricultural use and development. (Note that the 2007 draft policy is currently in effect.) A Land Capability and Agricultural Assessment has been undertaken for the Hub area and has determined the land is a combination of class 5s1 and 6s and is therefore suitable for the proposed industrial use.

State Policy on Water Quality Management

In accordance with Section 35.1 of *the State Policy on Water Quality Management 1997*, all road construction works must employ measures consistent with best practice environmental management to prevent erosion and the pollution of streams and waterways by runoff from sites of road construction. Appropriate silt control and

⁴ SGS Economics & Planning, Industrial Land Demand Tasmania, April 2008

sedimentation measures will be developed by the contractor for approval by DIER to protect the surrounding waterways and prevent potential soil erosion on site.

State Coastal Policy

The Tasmanian *State Coastal Policy 1996* is applicable to all land within a distance of one kilometre from the high-water mark. The proposed development is not within one kilometre of the River Derwent and accordingly this policy does not apply to the project.

Anticipated Transport Impacts

The cost to society and industry of heavy goods vehicles is reflected in road accidents, noise, pollution, climate change, road infrastructure costs and congestion.

With the relocation of the Macquarie Point operations to a new transport hub at Brighton, the total traffic fleet mix will change on the different sections of the Brooker Highway. The pattern of shift indicates a reduction in heavy vehicle movements on the most congested road segments in greater Hobart, along Brooker Avenue. An increase in movements will be transferred to the more highly developed and less congested dual carriageway sections through the northern suburbs, a part of the network capable of coping with the scale of change.

Land Acquisition

The land to be acquired for construction of the new Hub was identified on the plan at Attachment 3 of the submission of DIER.

Land acquisition processes have commenced with the following actions having occurred:

- Ministerial approval to acquire the land has been received;
- Contact with affected landowners has been frequent during the due diligence/site investigation phase;
- Meetings were held immediately prior to the announcement of the preferred site in order to outline the process to be undertaken to acquire the land, and
- The Office of The Valuer General has been appointed to undertake the formal process of negotiations.

The affected landowners are:

1. Sutcliffe Earthmoving Pty Ltd – Total property area of 3.392 Ha is to be acquired.
2. JP and RJ Mundy and K Drake-Mundy – two separate titles are affected. The smaller parcel of land of 7.7 Ha is to be acquired in total. The larger parcel of land has an area of 126.4 Ha of which approximately 54.34 Ha is to be acquired. The existing use can be maintained on the balance of land.

3. Toll Australia owns a single title of land which is bisected by the Midland Highway. The land required for the Brighton Transport Hub is approximately 5.6 Ha on the west of the Highway. Much of the balance of the land to the west of the Highway is unsuitable for industrial purposes as a consequence of its topography and identification of threatened flora species. A drainage easement is also likely to be necessary along the southern boundary.
4. Jin Ju Liao – the entire land parcel measures 44.68 Ha of which approximately 9.9 Ha is to be acquired. The existing use can be maintained on the balance of the land.

Issues associated with values, access, injurious affection, amenity of balance of land parcels and so on will be negotiated by the Deputy Valuer General.

INDUSTRY CONSULTATION ON LAYOUT, OPERATION AND DESIGN

The project team has canvassed a wide range of transport industry operators, consultants and designers in order to inform the concept design that has been developed. The following parties have provided input:

Tasports

Tasports has provided extensive advice since project inception on existing freight handling, warehousing, functional requirements for the hub site, and cool store requirements.

Interfleet

Interfleet specialises in rail operation and logistics and, in association with Tasports, has provided design parameters such as rail track specifications and requirements for container storage and vehicle maneuvering and future development of the site.

Asia Pacific Rail

Asia Pacific Rail has provided advice on rail track design.

Maunsell

Maunsell conducted a review of the concept design and provided advice on hub layout, location of site facilities and future development of the site.

Pacific National

Discussion has been held with Pacific National at both senior management level and at operator level. The latter included a site inspection and review of operations at Macquarie Point with the Pacific National Site Manager.

Toll Transport

Toll has been consulted with regard to existing operations at Macquarie Point and also with regard to requirements for the new Hub site.

Workshop

A workshop with representatives from the above parties was convened to assess the concept design and develop a consensus view of what facilities should be provided at the new hub site. Given the competing priorities of various users of the site, a consensus view was also sought for the layout of the site to best cater for initial and future throughput. The agreed outcomes from this workshop have been incorporated into the concept design.

Other Intermodal Facilities

Members of the Hub project team also visited intermodal facilities interstate to gain insight into design issues, layout, operations, associated commercial developments including warehousing and integrated logistics. Sites were visited at Enfield (Sydney Ports), South Dynon (Melbourne, Pacific National) and Altona (CRT Logistics).

PUBLIC CONSULTATION

Overview

The Brighton Transport Hub has almost universal support in the community and with key stakeholders.

DIER has undertaken a comprehensive approach to consultation. This approach has been to hear the views of stakeholders, respond to them and pass on information as soon as it is available. A small number of people may be negatively impacted by the project and the approach has been, and will continue to be, to identify these issues, be open with the people affected and work with them on answers.

Web-Based Communications Program

A web-based communications management program has been developed in which all contacts with stakeholders and other interested parties is documented. An extract from the program “Events Since Project Inception” is included at Attachment 4. This identifies the type of contact that has taken place to date by both the Brighton Transport Hub project team, and also the Brighton Bypass project team as the projects have a number of common issues and are linked as one by some members of the public.

Also included at Attachment 5 is a further report from the communications management program “Issues Raised since Project Inception”. The issues which have received the most interest are:

1. Impacts during construction (18.39% of all communications)
2. Business Access (14.94% of all communications), and
3. Land acquisition (12.64% of all communications)

It should be noted that these are issues raised and are not necessarily concerns.

Consultation Undertaken

DIER has developed both stakeholder and communications management plans to guide the consultation process. Consultation undertaken to date is set out below.

- Engagement with the broader community during the life of the project is being delivered from the perspective of information and education using public displays, project updates via letter and/or websites, and media statements. The message generally is that this is a significant infrastructure project, which will radically improve freight handling operations in southern Tasmania. Letter drops have already occurred and displays have been mounted at the Brighton Council Offices and shopping centres.
- From the community's perspective, the Transport Hub and the changes to the Midland Highway and rail access are essentially one project and there is close contact between all DIER project teams to ensure a seamless and coordinated approach to stakeholder engagement.
- For property owners and key stakeholders directly affected by the project, there has been focused, direct and regular consultation at the individual level. Face to face meetings are held wherever possible.
- Where land is needed for construction of the Hub, the consultation process involves formal negotiation over land acquisition in accordance with the *Crown Lands Act 1976*. (Refer also to Section 4.3)
- DIER has established an Industry Reference Group (IRG). The IRG works collaboratively with DIER and is used as a key point of input into the project from transport associated industries. The terms of reference of the IRG are to:
 - Review the design of the hub and provide a balanced representation of industry perspectives, whilst understanding that there may be competing priorities and trade-offs that may be required.
 - Provide advice regarding the Hub in a manner that considers the project within the wider context of the statewide transport strategy.
 - Provide a conduit and link for information between the transport industry and DIER.
 - Provide advice on consultation and engagement methods with the transport industry.
 - Provide informed advice on how the transport industry will utilise the Hub.

Details of the membership of the Industry Reference Group was provided in Attachment 6 of the submission of DIER.

- Regular meetings are held with the General Manager and Mayor of the Brighton Council to keep them fully informed. Advice is sought and received from them on the most appropriate public consultation measures. Contact with Brighton Council officers has been ongoing with regard to services, planning and timing of Scheme Amendments and Development Applications.
- Additionally DIER has engaged in regular consultation and communication with the following:

- The Aboriginal Community via the Tasmanian Aboriginal Land and Sea Council (TALSC)
 - Surrounding residents and business operators
 - Consultants and sub-consultants to the project
 - Alinta Asset Management and Transend Networks Pty Ltd
 - Relevant State Government Agencies, including the Aboriginal Heritage Office of the Department of the Environment, Parks, Heritage and the Arts
 - The Commonwealth Department of Environment, Water, Heritage and the Arts.
- An information DVD is being produced.

ESTIMATED COST

A summary of the cost estimate for the project is presented below. A detailed estimate was included in Attachment 7 of the submission of DIER. The estimate has been prepared in out-turn dollars and includes a contingency of 30%.

In order to meet the required time frame for construction, the majority of costs (\$65M) will be incurred in the 2009/2010 financial year. A cost escalation rate of 6% has been used and delays to the start of the project will result in additional costs of around \$0.35M per month.

Summary of Strategic Cost Estimates

Description of Works	\$ M
Bulk Earthworks	\$11.3
Hub Stage 1 Rail and road within the Hub including hardstand, weighbridge, Hub manager buildings, fencing, rail external to Hub, cripple line, loco maintenance, lighting, services internal to site.	\$14.5
Rail Access	\$2.0

Public Roads	\$3.7
Site Services	\$0.9
Extension of utilities, stormwater, sewer, power	
Land Acquisition	\$5.2 ²
Bulk Goods Yard	\$3.0
Weighbridge, hardstand, facilities	
Coolstore	\$11.0
Pacific National Compensation	\$2.5 ³
Professional Fees, Administration and Overheads	\$4.8
Contingency	\$15.4 ¹
Cost Escalation	\$4.5
Total	\$78.8

Footnotes:

¹Construction costs are based on high level plans. Detailed drawings are completed at the next stage of the project. At this point more accurate costings will be developed. To allow for this and other variabilities in costings, standard practice is to include a contingency. A contingency of around 30% has generally be added to items as indicated on detailed estimate sheets.

²This figure could increase due to allowance for items such as loss of business and injurious affection.

³This is the figure that would have been payable to Pacific National under the current deed to compensate them for lost lease revenue. It will be open to negotiation with the new rail operator.

Impact on Consolidated Account

Subject to final agreements and policy decisions regarding operations of the Hub, it is estimated that the Hub will be cash flow positive to Government.

Project Funding

The Commonwealth Government has committed \$56M and the State Government \$23M for construction of the Brighton Transport Hub. The State Minister for Infrastructure has approached the Commonwealth Minister and sought approval from the Commonwealth for its contribution to be allocated against State funding for other Auslink projects, thus allowing the State Government to fully fund the Hub project. This approach has been taken to facilitate timely project approval processes. While the Commonwealth has indicated in principle support, final approval has not been received to date.

PROJECT BENEFITS

Overview

The primary project benefits are provided by the development of a more efficient transport system. This results in lower transport costs in the road freight and rail sectors, which has flow on benefits through the Tasmanian economy. In addition, reduced transport costs will result from a shift in freight from road to rail. It is not possible to be definitive on the benefits due to the range of assumptions that are necessary and the uncertainty about future developments. Notwithstanding this, a range of studies have been undertaken on the benefits of the use of rail, the benefits that would accrue from improved rail productivity, and from a major infrastructure project. While some of these studies are not directly related to the Brighton Transport Hub, the study results provide a clear indication of the benefits that will accrue from the construction of the Hub.

The Hub will provide a focal point for consolidation and deconsolidation of freight. As the transport sector develops, there will be an economic case for larger trucks in the future. There will be sound reasons for excluding these trucks from central Hobart. Long term target planning needs to cater for a transport hub on the northern outskirts of Hobart to undertake the consolidation and deconsolidation task.

Economic Gains from Infrastructure Spending

The Centre of Policy Studies at Monash University⁵ was commissioned by DIER to review the economic effects of replacing the existing Macquarie Point facility with a new transport hub at Brighton. Their report (which included various additional rail upgrades) states:

- In a typical year of the operating phase, real gross state product is projected to be around \$10m above the baseline forecast (or about 0.035%) as a result of the new transport hub and rail projects.
- Employment during a typical year of the construction phase is projected to be almost 0.14% (or around 325 average-time jobs) above its baseline forecast value.
- Employment during the operating phase is anticipated at around 0.02% (around 60 jobs).
- Tasmanian real household consumption is projected to be over \$9.8M (or a little over 0.07%) above baseline in a typical year of the construction phase.
- Tasmanian real household consumption is projected to be around \$5M above the baseline forecast in a typical year of the operating phase.

It should be noted that the modeling undertaken by Monash was based on the assumption that the project cost would be \$50M expended over a three year period. Currently the capital investment just for the Hub (excluding land acquisition and contingencies) is likely to be \$70M expended over a two year period. The results

⁵ Monash University Centre of Policy Studies, The Economic Effects of Brighton Railhead and Port Container Centralisation, 8 June 2007 (revised 11 October 2007)

from the Monash study are provided only for indicative purposes. A range of assumptions for the study and the parameters of the study do not apply to the current Hub project.

Lower Transport Costs for Tasmanians

As noted above, it is estimated that the Brighton Transport Hub will result in a reduction in the rail round trip time Hobart/Burnie, of 4 hours 40 minutes. This will provide significant productivity improvements for rail and improve competitiveness with road.

Reduction of Costs to Transport TEUs (Twenty Foot Equivalent Unit Containers)

In 2007 Chamonix (Aust) Pty Ltd⁶ estimated a 48 hour round trip cost of hauling a TEU from Burnie to Hobart and returning a similar load at \$604 (\$302 each way). If the efficiencies identified in its report were realized (which included amongst other things a new Transport Hub at Brighton and a 24 hour round trip), Chamonix forecast that operating costs would reduce to \$374 per round trip (\$187 each way). This would be a significant reduction in costs which would provide a marked improvement in rail's competitive position with road. While the Hub alone will not achieve a 24 hour turn around, it will reduce current turn around times.

Contestable Freight – Transfer from Road to Rail

Contestable freight is that part of the existing road freight task that could potentially be transferred to rail. General container freight on rail has been at higher levels in the past than it is now, despite an increasing land transport freight task. Therefore it is reasonable to assume that much of the freight that has previously converted to road from rail remains potentially contestable.

Analysis of contestable freight from 2005/06 Freight Demanders Survey indicates that a significant proportion of current road freight could switch to rail if the cost and reliability of rail is enhanced.

With a reduced cost base, rail should be in a position to compete effectively with road for existing freight on road and also for the anticipated substantial increase in Tasmanian freight requirements.

Benefits From a Shift of Freight From Road to Rail

There are a range of social and economic benefits that will accrue from a modal shift from road to rail. These include externalities in the areas of reduced road crashes, reduced environmental pollution and reduced congestion. In addition there would be a reduction in the need for road maintenance.

Reduced Congestion on Brooker Highway

Relocating the Macquarie Point facility to Brighton would shift the transport focus of intermodal related freight onto the northern sections of the Brooker Highway, particularly north of Claremont where current demand relates mainly to line haul

⁶ Chamonix (Aust) Pty Ltd, Rail Operating Costs Tasmanian Intermodal Services, 13 April 2007

movements to and from the northern ports. DIER has undertaken an analysis of TOLL vehicle movements on the Brooker Highway in 2007 and the change that could be expected after the Brighton Transport Hub is operational.

2007 Toll Vehicle Movements to/from Macquarie Point (total per day)

53 Cars	
9 Rigids	
81 Semis	

Claremont	
80 Cars	Brooker Highway
15 rigids	
114 Semis	

Derwent Park Road	
178 Cars	
133 Rigids	
243 Semis	

Hobart (Macquarie Point)	

Anticipated Change in Toll Vehicle Movements Following Relocation (total per day)

+177Cars	
+152 Rigids	
+124 Semis	

Claremont	
+124 Cars	Brooker Highway
+140 rigids	
+58 Semis	

Derwent Park Road	
-45 Cars	
-52 Rigids	
-163 Semis	

Hobart (Macquarie Point)	

The pattern of shift indicates a reduction in heavy vehicle movements on the most congested road segments in greater Hobart, along Brooker Avenue, and some increases in heavy vehicle numbers on the more highly developed and less congested dual carriageway sections through the northern suburbs, a part of the network capable of coping with this scale of change.

Increase in Regional Employment

Construction activity will create significant local employment over the construction period.

Ongoing employment will result from a shift of employees at the current Macquarie Point site to Brighton. Toll has indicated that 150 employees will be employed at Brighton, while it can be expected that the rail operator will employ at least 16 people (current staff numbers advised by PNT, October 2008). Growth in these numbers will occur as activity expands.

Other employment growth will be dependent on the range of supporting activities that are conducted at the Hub. It can be expected that staff for employment growth will in the main be drawn from the Brighton area.

Additional Land for Industrial Development

The Brighton Transport Hub Project has initiated a Brighton Planning Scheme Amendment to rezone approximately 32 ha of land from rural to industrial.

In total, approximately 87 ha of land is to be acquired by Government, of which approximately 58 ha will be available for hub and industrial development after construction of the transport hub and associated facilities that will transfer from Macquarie Point.

Availability of Macquarie Point for Redevelopment

Relocation of the road and rail transport hub facilities at Macquarie Point to Brighton will make Macquarie Point available for more appropriate redevelopment.

EVIDENCE

The Committee commenced its inquiry on Monday, 10 November last. Accompanied by Officers of the Department of Infrastructure, Energy & Resources and the consultants, the Committee inspected the site of the existing transport hub at Macquarie Point, Hobart. Such inspection was conducted by Peter Clements, Operational manager, Pacific National.

The Committee then proceeded to the site of the proposed works at Brighton, following which the Committee reconvened in Committee Room 2, Parliament House, Hobart. The following witnesses were called, made the Statutory Declaration and examined by the Committee in public:-

- David Spence, Project Director, Brighton Transport Hub Project, Department of Infrastructure, Energy & Resources;
- David Conley, Project Manager, Brighton Transport Hub Project, Department of Infrastructure, Energy & Resources;
- Selena Dixon, Senior Project Officer, Brighton Transport Hub Project, Department of Infrastructure, Energy & Resources; and
- Phil Cantillon, Project Director, Brighton Bypass Project, Department of Infrastructure, Energy & Resources

Overview

Mr Spence provided the following overview of the project:-

As a general overview statement, it really is rare that you can get an opportunity to work on a project like this that is really going to be of substantial benefit to future Tasmanian generations. So we feel pretty privileged in that regard. As we all know, freight is critical for us all. For all Tasmanians it really is the life-blood of the community. That is really what this project is all about in terms of an overview statement. It is about transport efficiency. That is the real focus from DIER's point of view. We have been looking at moving Macquarie Point now for approximately 10 years, so it is not something that has just come to the fore. The development of transport hubs on urban fringe areas is a trend that we are seeing across Australia, so it is not something that is particularly unusual for us.

In terms of an overview I think it is instructive to look at our current transport system and to do a bit of focus in terms of where we see the transport system going. Prior to doing that it might be instructive to just give you a very quick outline of what is a transport hub. They do differ. Put simply, a transport hub is a place where goods, freight is transferred from one type of transport to another. That is simply what it is. So it may involve moving freight from one road vehicle to another road vehicle. I think out on the inspection they used the words consolidation and deconsolidation - fancy words for saying we are putting freight on and off larger trucks and onto smaller trucks, which will be an important component of the hub. I think some people think of it as just a rail facility. It will importantly cover road-to-road as well.

The second area covered is road-to-rail and rail-to-road - again, the transfer of goods. The fourth area is road or rail to ship though obviously that is not occurring here. So their core feature is that transfer function. As well as that, other hubs can pick up other activities, for example providing for warehousing activity, providing for storage in terms of warehousing and providing facilities for unpacking and packing containers...

In terms of moving forward, I will just quickly run through the major changes occurring in our transport system because these provide the rationale for the hub in itself. These are things that I think a number of the members of the committee will be aware of. Industrial land in southern Tasmania is in short supply and is becoming increasingly crowded. Glenorchy and Derwent Park have really reached their capacity. They are near residential areas, so there is a potential conflict situation there. In terms of the future development of southern Tasmania, available industrial land is a real issue and what we are finding is that the use of industrial land is moving further out from central Hobart and from Glenorchy and Derwent Park. A number of the businesses that you saw this morning as we drove past them are businesses that have relocated from Derwent Park and Moonah and the northern suburbs of Hobart.

The Brighton Council has really seen this happening and they are looking to cater for industrial and commercial development in the area that we looked at this morning. That is one of the key areas.

The road link with Hobart is a key issue in terms of the Brooker Highway. The northern part of the Brooker Highway is still relatively free-flowing and efficient and it is designed to accommodate a much larger traffic flow than is currently there. The southern end is congested so that is an issue that, as transport planners, we need to look at.

Historically, the Hobart port has really gone through a significant change over the last two decades. As we know, the port's throughput has significantly declined, but that does not mean that freight going out and into southern Tasmanian has gone down. In actual fact the opposite has occurred. So, the freight task between southern Tasmania and northern ports has continued to increase.

... We know rail is struggling to be competitive with road. It is a situation that I think we are all aware of. The rail upgrade package that has been funded by the State and Commonwealth governments will initiate a significant improvement in reliability and cost reduction. However the hub is going to provide a key role in terms of making rail more competitive with road. Probably the most important factor of all is freight growth which is, certainly in terms of looking forward through to 2022, looking at doubling over that period. Freight growth is going to grow significantly and container freight growth has already significantly increased over the last five years. That trend is going to continue. So again, as transport planners, we need to take that into account in term of what we are looking for.

What do we do about these changes? We are looking at focusing on the whole system. The Government is really looking at the best way to tackle these transport issues in a system-wide approach. What is the best way to move freight in an efficient way? What is the best way for us to move freight from southern Tasmania to and from the northern ports? The way we have looked at that is in a whole-chain approach. So we are looking at in terms of the logistics chain, all the way from the northern ports to southern Tasmania. We look at where the choke points are. Where are the points where efficiency is challenged? Where are the points where the costs are most incurred? They really are at the hubs because they are the points where you are moving freight from one mode to another mode. That involves costs and time. We really need to make the hubs work as effectively as possible. The Brighton transport hub will perform a critical function there in terms of getting freight from southern Tasmania through to the northern ports.

... The other key part of the overview that I raised previously was this competitiveness situation with rail. A key motivation behind the hub project is to improve the competitiveness of rail. At the moment, the best turnaround time that can be achieved between Hobart and Burnie is 32

hours. As we have noted in the submission, we can knock 4 hours 40 minutes off that through putting the hub in place, which will make a huge difference to rail. Then when you combine that with the planned expenditure for the Commonwealth and State governments on rail, which is going to improve the pulling capacity of it by removing curves and improving the track, it is going to make a substantial difference.

In terms of current use of Macquarie Point, I think this morning you had the example of the zinc, which is a very good example of a very inefficient logistics chain arrangement, where the zinc comes down to Macquarie Point and is put in a shed and then put in a container and then put back on a truck and eventually it gets its way onto the train and goes north. It is a good example of the inefficiency in terms of the logistics chain of arrangements.

Just a couple of overall freight figures - the total freight that comes in and out of Macquarie Point at the moment with road and rail is about 680 000 tonnes, and 500 000 tonnes of that is transported by rail either north or south, so it is certainly a significant volume of freight.

In terms of the approvals and the process that we have gone through to date, we put together a proposal to gain State and Commonwealth government funding for this project and that was approved in November 2007, so we were looking at \$79 million...

Prior to getting the approval for the funding we had actually started to look at sites, and we went through an exhaustive process of looking at sites. The first thing we did was develop functional specifications for the site, which is what we wanted the site to be, and then we used that to develop criteria to assess suitable sites. The type of criteria we looked at included close proximity to Hobart; it obviously has to be close to road and rail; it has to be relatively flat, so the actual topography has to be right; it needs to be set in the right environment, and by that I mean in relation to the planning area it would sit in, so we were really looking for a site that would have absolute minimum encroachment in terms of residential areas, so the planning environment needs to be right; and we needed a large site to cater for future development.

Macquarie Point

The Committee questioned the witnesses as to the suitability of the current Macquarie Point facility. Mr Spence responded:-

It is in the wrong place and it adds costs to all the goods that come into and out of southern Tasmania, which not only affects southern Tasmania but also affects the northern part of the State. In modern planning terms, location of a transport facility like this in the centre of the city is inappropriate. It compounds our traffic problems.

... In terms of the proximity of the port and in terms of urban congestion, in previous days I think it was an appropriate location. I think times have changed and you can see time has changed further in those directions. There is no doubt at an appropriate time it was the appropriate location. The other key thing we noticed today was the encroachment of residential and small business at Macquarie Point. I do not know whether Peter mentioned it to you but, for example, they have to keep that site watered constantly to keep the dust down for the local residents.

The Committee questioned Mr Spence as to whether there was any road-to-road transfer. Mr Spence responded:-

There is, yes. There is quite a bit of road-to-road transfer.

... One other thing certainly worth mentioning is that the rail journey between Brighton and Hobart is very slow and very inefficient. There are 21 level crossings which require very low train speed to minimise the risk of crashes. In terms of rail competitiveness and transport efficiency it would be a good thing not to have to cover that area.

Transporting zinc

The Committee questioned the witnesses regarding the impact, if any, upon the road infrastructure that would result from the transport of zinc. Mr Spence responded:-

I certainly think the northern section could and, indeed, the whole of the Brooker Highway can manage that in terms of the weight. It is managing it at the moment. The real issue with products like zinc is the congestion that it is causing on the southern section. It would increase the maintenance costs of the whole.

Mr Cantillon added:-

In terms of traffic, the department has done an analysis in terms of the extent of the adequacy of the highway for its current loadings et cetera and what takes place. We commit the maintenance funding to carry out the necessary work and we have programs that support those initiatives in terms of rehabilitation works. Essentially, we see it as business as usual for the moment. Everything that is being planned at this stage is consistent with the framework that we have in place to manage the highway.

...There were pavements built in that area in recent times and they are designed for a 20-year pavement life and are based on a certain freight volume. How they work it out is through equivalent standard axle, which means the number of trucks et cetera that are travelling that section of highway. Any increase in impacts may have an effect, but at this stage we do not believe that they will be significant in terms of the long-term pavement asset. There are always sections of highway that

these new developments occur on and our maintenance regime responds to those developments as is necessary and we do not necessarily see anything that would be untoward in terms of managing that part of the network.

Mr Conley added:-

... Just in the context, if we are sort of looking at 16 000 vehicles on the Midland Highway in that area, say in Brighton - it is higher as you head south, of course - 10 per cent commercial vehicles would be a broad rule of thumb of what that might carry. That is 1 600 heavy vehicles a day, and the zinc works alone adds 30, so it is not highly significant in the overall context of what the highway carries.

Rail operator

The Committee put the proposition to the witnesses that the proposed works were entirely predicated upon an effective rail service operating in the state and consequently questioned them as to what the impact would be were there to be no such service. Mr Spence responded:-

We have obviously given that a great deal of thought over the last 12 months. We really need to act on the information that we currently have and we need to look at forecasts moving forward. I have talked about the forecasts over the next 20 years or so, so we know that freight is going to increase markedly; it is going to double over the next 20 years. We know there is a need for a truck consolidation point on the northern outskirts of Hobart so, irrespective of what happens with rail, we know we are going to need that. That is going to become more important as we progress.

Based on current information that we have and forecasts, we can see that there is clearly going to be a need for the hub. First up, we know we are going to need it for road and our view is that we are going to need it for rail. The reason we have that confidence is the Commonwealth and State governments have both provided a commitment to the future for rail, evidenced by the substantial funding that has been put aside.

The Committee observed that such commitment was for infrastructure rather than an operator or rolling stock. Mr Spence responded:-

No, but certainly in my mind that is going to make it more attractive for an operator to come in. The State Government has made it clear that in a long-term sense they are behind rail. The State Government has also made statements about looking for a modal shift - let's look to shifting from trucks back onto rail. I think certainly in the planning we have looked at we see that there is a long-term need for the hub; we see there is a long-term future for rail. As transport planners, it is essential that we plan on that basis.

The Committee questioned the witnesses as to whether the proposed works would still be needed for road transport if a rail operator was not found. Mr Spence responded:-

It would certainly be needed for truck movements in terms of that consolidation and de-consolidation issue. Macquarie Point would be too crowded for the truck activity and also, as I mentioned before, there is that issue in terms of encroachment on residential areas.

Statewide Plan

In reference to the submission of the Department where it was stated that the Brighton transport hub is an integral part of a statewide transport plan, the Committee questioned the witnesses as to whether such a plan existed. Mr Spence responded:-

It is certainly a part of the southern investment program, which is a plan that was put forward to the Commonwealth and State governments in terms of seeking funding, so we achieve funding through that process. In terms of a documented plan, it is really part of the principles that I have talked about, about us looking at the logistics chain and making sure that we get an efficient logistics system in place.

...In terms of a documented plan for the State, those principles are probably enunciated in election documents. That would be the best place to be looking for transport across the whole State logistics-based.

...There is certainly a lot of work that has been done on a transport policy, which is being developed at the moment.

... The case is very clear in terms of the fact that Macquarie Point is inadequate and inefficient so they are the types of issues we were looking at in terms of its standing above other projects.

Business case

The Committee questioned the witnesses as to whether a business case had been prepared for the Brighton Hub. Mr Spence responded:-

In terms of the design of the hub and the costing, David from Pitt and Sherry has played a key role.

There has been a vast range of studies done. A number of them have been done in terms of looking at which is the most appropriate site but prior to that we did a number of studies. For example, there is a couple that are referred to in the report that we have done for you.

We got Monash University to have a look at the economic effects of the Brighton railhead and the port container centralisation. That is a study that was done back in October 2007. We have done a number of studies

that look at the financial and economic impacts in terms of the transfer of freight from road to rail or rail to road.

We have done a study by a company which is also referred to in the document we have given you on rail operating costs. We did two or three other studies, and Mr Hall mentioned the one by Maunsell. We have done studies in terms of looking at appropriate sites and appropriate site designs. So there has been a vast range of studies that we have done over the last year or so that have led us to where we have got to.

The Committee questioned the witnesses regarding the comparative advantages of the proposed facility. The following exchange ensued:-

Mrs NAPIER - *On page 30 you have made a reference to contestable freight and an analysis of contestable freight for the 2005-06 survey indicates there would be a switch of current road freight to rail if the cost and reliability of rail is enhanced so you have this improvement of four hours forty for a round trip turnaround and then you have provided us with some figures about how much that would save. As I understand, it goes from \$302 - I think that would have to be per tonne, wouldn't it?*

Mr SPENCE - *No, it is per trip.*

Mrs NAPIER - *Per trip - \$302 per trip down to \$187. What input have you got that that would actually be sufficient at a critical point at which you would get that switch of road freight over the rail?*

Mr SPENCE - *Our analysis has shown that the costs for a TEU from Burnie to Hobart by road is somewhere between \$245 and \$260 a tonne and you have just quoted the figures for rail so that gives us quite considerable comfort that if we could achieve that turnaround time change that would involve -*

Mrs NAPIER - *Do you reckon you could get it down to \$187?*

Mr SPENCE - *That is certainly what this expert's study has told us. That is not all through the hub, that is really through some of the rail improvements as well so that is getting that turnaround time down to 24 hours.*

Mrs NAPIER - *It seems to me that you have reduced the turnaround time by almost five hours but this seems to suggest that this brings about almost a halving of the cost factor and I found that a fairly big jump. The study shows that we have chopped five hours off a 32-hour turnaround time?*

Mr SPENCE - *No, this study is broader than the hub but it looks at reducing the turnaround time to 24 hours. As I say, it is not all attributable to the hub.*

Mrs NAPIER - *It is currently about 32?*

Mr SPENCE - It is currently 32 but the train ends up sitting there so it actually is 48.

Mrs NAPIER - Because of the logistics of the yard.

Mr SPENCE - Yes, so it actually sits there. This report looks at bringing it fully down to 24 hours and this is their estimate of the savings that would be achieved.

We have done some detailed studies on contestable freight. One thing that gives us comfort is a lot of the freight that rail has lost we believe could be won back. We have looked across all freight classes and what could be potentially shifted back from road to rail and we are as confident as we can be with market situations in terms of that freight coming back onto rail. Certainly, our estimate is that there will be 500 000 tonnes that could come back to rail if rail were on a competitive footing.

Mrs NAPIER - You are saying that we should not just judge it by the turnaround time -

Mr SPENCE - No.

Mrs NAPIER - because I thought the turnaround time included the amount of time that the train ends up sitting and waiting.

Mr SPENCE - It does. Part of the problem with rail at the moment is its efficiency, not only in terms of time but also its reliability to get to its destination intact and on time.

Mr HALL - David, if private enterprise were to look at this scenario and develop a business case do you think they would have built it?

Mr SPENCE - Once you take public good into account, without a doubt. It has happened all around Australia.

Mr HALL - Basically the catalyst for this is an election promise from the Feds and a chip in from the State as well. I suppose you could argue it could have been a PPP - a public-private partnership in this case. Is private enterprise putting any money in or is there none at all?

Mr SPENCE - No. There certainly would not be that attraction up-front for private enterprise to put the initial capital funding in. We are not envisaging that there will be a commercial return on the full capital value of it. There is a significant component of public good in this.

Mr CONLEY - We have also had discussions with Toll transport and that is sensitive - there are deals they want. One of the things that they said to us is, 'We need to get a good outcome here otherwise we will build our own'. They wave that as a big stick in front of us. To answer your

question, Greg, the private sector do see some benefit in this kind of modern state-of-the-art facility and they would almost say, 'Unless we get the outcome we want from Government we can do our own thing with warehousing and different facilities'.

Mr HALL - I suppose you could turn that argument around and let them do it, they are a national company, they are a big company, and then you would have more taxpayers' dollars to do something else with.

Mr CONLEY - Yes, but then I guess they lock out all the other users and use their market power.

Port activity

The Committee questioned the witnesses as to the level of activity of the Hobart port. Mr Spence responded:-

Certainly in terms of our transport planning, the northern ports will continue to be the most-used ports in Tasmania, with the cost of shipping. I do not have the figures on the Polar situation but I suspect it is probably a fairly small but important market and a critically important aspect for Hobart. There is certainly an indication that that will continue. But, no, certainly the continuing focus will be on the northern ports for the bulk freight transport.

Mr Conley added:-

Again, we were talking to Toll last week and their view was that freight would go into Melbourne on ships. It is an extra 14 hours steam into Hobart and back. All the freight will go into Melbourne and operators like Toll will run smaller ships that will take it across from Melbourne to Bell Bay. That is the thinking of how things will develop.

Management

The Committee questioned the witnesses as to whom the management responsibility of the new facility would be vested. Mr Spence responded:-

There is a short reference in the document to the fact that we will very shortly be going out to a competitive selection process to decide who is going to manage the hub. The manager of the hub will be determined through that process, and if you look interstate, occasionally it is a port authority, or a rail company or a transport logistics company, so we think there are a lot of advantages in going out to the market ...

... There is a lot of land out there and it really needs someone who is going to attract some businesses there as well.

... In terms of looking at the demand for industrial land at that site, it is substantial, and that cash-flow statement really refers not to the central

hub itself, it refers more to the warehousing and businesses that will be developed around it.

Sustainability

The Committee questioned the witnesses as to what arrangements are proposed for water collection, reuse and recycling. Mr Spence responded:-

... we will require detention basins there simply because the downstream capacity is limited to what is already underneath the railway line. It is quite a high embankment and it would be difficult to augment the size of that culvert, and the same applies through the highway here - there is already a crossing underneath the deep fill. I guess the sheer size of that hard stand will generate excess run-off so the solution to that is stormwater detention basins and that would create an opportunity for beneficial reuse of stormwater.

Having said all that, I am not sure how often it will fill up. You can do all these things based on current designs for stormwater, based on 100 years of history but probably not the last 10 years when it has been exceptionally dry. You simply may not be able to hold water in them; you may not get enough water. You could fill them up and use them in one or two months and then find they may not fill up for another few months.

...There are a lot of sustainability issues coming into design today and principles that would apply. In a broad sense, whether we have a hard-stand area that is concrete or we have a building that sits on top of it with a hard roof on it, the amount of run-off is not substantially altered. It is clearly when we change from a greenfield site that it will absorb a fair bit of run-off to a hard surface. That is what generates a lot more water.

At this stage, other than the detention basins to control the flow, it has not been taken further to see what potential uses there might be for that water.

Mr Cantillon added:-

Part of the approach that we are taking with the Brighton bypass is the development of a sustainability management system. The construction of the bypass deals with the construction of the hub and other buildings. We are basically in progress, it has broken new ground for it, and we are building it up in layers as we understand more. We are having a lot of dialogue with whole of government and councils and stakeholders. It covers a whole series of areas. Part of that is typically in environmental areas - water management, noise levels, air qualities and resource use are taken into account as much as can use, and the type of materials, what we usually do with the water that is derived on site. We are building up a framework. We hope to have a framework unpacked to the next level over the next couple of weeks and then once we get a contractor on board the next step would be to work with him for developing the framework after further consultation with the broader body. So we do recognise that it is

very important to have a sustainability management framework and typically, what we do with a large project is bring a lot of the initiatives that we develop as part of these large jobs back into the general business. There are a lot of things we are doing at the moment but we see this as a really good opportunity to extend the way we do our business.

Rail Entry / Exit Points at the Brighton Hub

The Committee discussed whether there was a need for a complete loop to be built into the design of the Hub. Subsequent advice was provided as follows, and is accepted by the Committee.

“The design for the Hub has a northern rail access that goes the full length of the Hub with a short hook at the southern end finishing as a dead end. The need for the rail to connect with the mainline at the southern end has been assessed and discussed with Pacific National.

There is currently one train per day that would access the Hub from the southern. Pacific National’s advice is that the southern end access point is not required from an operational point of view. Access to the Hub from the south can be achieved by the construction of a “Y” facility (this enables locomotives to turn around). Alternatively trains could reverse into the Hub at the northern end. This is not preferable from an operational perspective.

The construction of a southern access would be an expensive undertaking. One business would need to be acquired and partial acquisitions from at least two other properties. There would need to be an additional 0.7 km of track constructed with an associated turnout facility. In addition there would need to be a lengthy crossing of the southern road access into the Hub.

Thus, based on cost and operational need, a southern rail access to the Hub cannot be justified.”

DOCUMENTS TAKEN INTO EVIDENCE

The following documents were taken into evidence and considered by the Committee:

- Brighton Transport Hub Project– Submission to the Parliamentary Standing Committee on Public Works, Department of Infrastructure, Energy & Resources, October 2008;
- Correspondence dated 5 November 2008 from Tony Foster OAM, Mayor of the Brighton Council to the Secretary entitled “Brighton Transport Hub Project”; and
- Correspondence dated 20 November 2008 from David Spence, Project Director, Department of Infrastructure Energy and Resources to the Secretary.

CONCLUSION AND RECOMMENDATION

The evidence presented to the Committee clearly demonstrated the need for the proposed work to go ahead. Once complete, the works will improve rail productivity by enabling terminal expansion in line with growth in freight throughput, which cannot currently occur at Macquarie Point. The new hub will also provide:-

- A safer, more efficient, and productive rail network.
- An increase in the rail mode share through a reduction in turnaround times on the north-south rail line.
- More efficient road freight transport.
- An improvement in safety and amenity through the reduction of heavy vehicle transport on the most congested section of the Brooker Highway.
- An improvement in safety and amenity through the increased use of rail for north south freight as a consequence of a reduction in trucks on the Bass Highway east of Burnie; the East Tamar Highway south of Bell Bay; Wellington and Bathurst Streets in Launceston; and the Midland Highway.

The Committee also notes that the success of this project is predicated largely on having an effective rail service in Tasmania. Therefore the Committee notes that at this point in time a new rail operator has not been found and the Government needs to be well cognisant of this fact.

The Committee recommends the project, in accordance with the documentation submitted, at an estimated total cost of \$79,000,000.

**Parliament House
HOBART
15 December 2008**

**Hon. A. P. Harriss M.L.C.
CHAIRMAN**