Tasmanian Rail Network - Objectives and Priorities for Action 2010 – 2011to 2013-14.

March 2011

Department of Infrastructure Energy and Resources

Tasmania
Explore the possibilities

Contents

Minister's Foreword

On 1 December 2009, Tasmanian Railway Pty Ltd (TasRail) secured ownership of the Tasmanian rail network and began operating train services for freight customers. This was an historic day. Through the establishment of TasRail, the Tasmanian Government is ensuring that rail continues to be a viable transport option in Tasmania with benefits to industry, the broader community and the State's economy. This is our vision.

For the first time the strategically important Melba Line between Zeehan and the Port of Burnie are now operating under government ownership.

Investment in rail infrastructure has lapsed under private ownership. The Tasmanian Government's key priority is improving network safety and reliability. A return of customer confidence and commitment to the rail network will ensure its viability for the long term. Therefore, the focus of investment is on the 'existing network first' to ensure that this outcome is realised.

The Tasmanian and Australian Governments have committed funding in excess of $400 million in recent years towards rail track infrastructure, intermodal projects and rolling stock replacement to ensure the viability of rail as a transport option. This investment will result in significant improvement to safety and efficiency of the rail network. In addition, the Tasmanian Government has committed $78 million for the construction of the Brighton Transport Hub and the Australian and Tasmanian Government's and the George Town Council have committed funding to improved port interfaces at Bell Bay. This investment will mean that rail is better integrated into the transport system – leading to efficiency in the transfer of freight between rail and road and rail and ships.

Improved competitiveness and efficiency will result from complementary investment in locomotives and wagons. In the 2010 State Budget, the Tasmanian Government committed $130 million over four years to upgrade rolling stock assets. At the same time, the Government has committed $70.8 million towards maintenance and administration. This funding, in addition to ensuring the stability of continued business operations, will enable TasRail to upgrade to a positive train control system, undertake essential environmental and structural maintenance works on the Burnie Ship Loader and invest in new high-rail vehicles and workshop equipment.

This paper sets out the Tasmanian Governments vision for the rail network and the objectives we have identified as being important to transport and the Tasmanian Community. These objectives are:

- The safe operation and use of the rail network, including interaction with the broader community.
- A greater proportion of Tasmania's growing freight task is transported by rail.
- A viable rail network for the long term.
- A cost effective and efficient transport system.

Government ownership and investment will not in itself guarantee the future of rail in Tasmania. Industry and transport service providers must make transport choices that support the long term role of rail in the transport network. This requires joint commitment and we look forward to seeing that happen.

I look forward with confidence to the revitalising of the rail system and the opportunities that this will bring for the future.

David O'Byrne MP
Minister for Infrastructure

Tasmanian Government's vision for rail

The Tasmanian Government's vision is for a viable rail network as part of an efficient land transport system.

Ultimately, the use of rail by the market and the price the market is willing to pay for rail freight services underpins the commercial viability of rail as a transport option. There are a number of service attributes that attract the market to transport services, including reliability, price, frequency, timeliness and consistency of the service being provided. In the context of rail services, reliability and price has been identified as the core service attributes to attract market share.

The path to achieve this vision is reliability to viability.

It is fundamental to understand the interdependency between the government, rail infrastructure providers, rail service providers and the transport market in achieving the long term viability of rail.

Rail service providers, such as TasRail, will only invest in rolling stock if they have certainty around access to, and the performance of, the rail network. Likewise above-rail investment needs to be underpinned by volume commitment from end customers. The transport market will only purchase rail services if the service is reliable and is offered at a competitive price. Infrastructure investment decisions by government are based on efficient transport outcomes and competing budget priorities. Infrastructure investment cannot be justified if the network is not delivering transport or social benefits arising from a sustainable market share.

The Tasmanian Government's transport priority is improving the reliability and enhancing the safety of rail infrastructure. However, this will not deliver a viable rail network alone. In the short term, investment by TasRail in locomotives and wagons is necessary for efficiency improvements necessary to attract market share. Conversely, the transport market will increasingly need to utilise rail services to justify future investment and to be willing to pay a fair cost for using the services. No government can afford to provide state-wide infrastructure for a transport mode for the sole reason of providing just another market competitor.

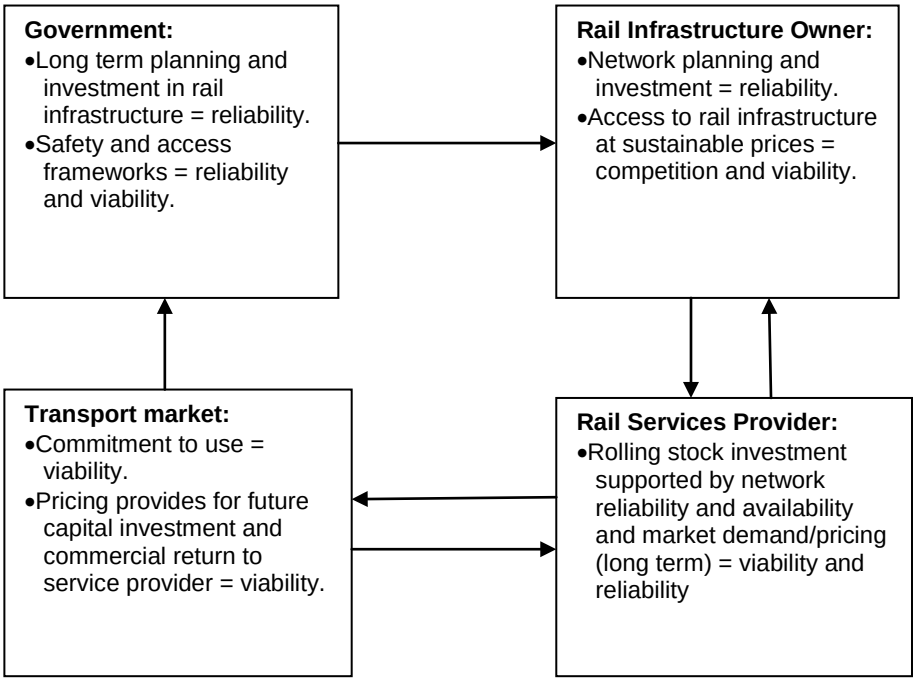
In addition to the significant commitment to investment in rail infrastructure, the Tasmanian Government also recognises that rail freight transport is part of a supply chain that incorporates intermodal transfers with heavy vehicles and shipping. To increase rail productivity, the Tasmanian Government has been prepared to invest in the Brighton Transport Hub and contribute to the Bell Bay Port access enhancements. Current investment in rail infrastructure will be important to keep transport options open for the future and to meet emerging challenges.

Transport safety continues to be a key priority for this Government – the rail network and rail services operate under an established rail safety framework. The Government is also ensuring an appropriate rail track access framework is maintained. The Tasmanian Government has declared the rail network open access meaning it is available to any accredited rail operator to offer rail services.

The Tasmanian Government's primary role in the freight transport system is the provision of infrastructure, either a road or rail network and not to provide freight services. Consistent with this approach, the Tasmanian Government does not see itself desirably as the long term rail freight operator, preferring that this function is undertaken by the private sector. TasRail will assess rail freight operations on a commercial basis, actively promoting the advantages of rail transport to maximise its market share in competition with road transport.

Government, through its policies and investment in infrastructure, assists to establish confidence in the future operation of rail track infrastructure. The surety of the asset is further enhanced by Government through safety frameworks.

The diagram below illustrates the interconnected roles and relationships within the provision and use of rail as a transport option.



It is important to note that this document is, by virtue of the recent establishment of TasRail, an interim document that spans the current funding commitments and is intended to be updated as TasRail establishes its business model and evaluates its commercial market share, infrastructure priorities and potential future funding requirements. Time will allow the new business sufficient time to establish itself within the transport market.

The Tasmanian Government will work with TasRail to establish key performance indicators for both the rail network and service operations to monitor the long term viability of rail. At some time in the future this may result in the need for network prioritisation. The key focus for the Tasmanian Government is investment priorities and transport outcomes across the land transport network (both road and rail).

Introduction and Historical Background

Introduction

The Tasmanian Government's purchase of Pacific National's Tasmanian rail assets and the establishment of TasRail provides a timely opportunity to provide a clear statement of its rail network objectives and priorities for action over the next five years.

This document brings together the existing policy and regulatory frameworks as well as a vision for the future. In addition to establishing objectives and identifying priorities, it also provides an overview of the Tasmanian land transport system and major policy influences as the broader context in which rail operates, as well as identifying the key parties, roles and responsibilities, governance and funding arrangements.

Timeline of Rail in Tasmania

Ownership of the rail network and the operation of train services have, at various times, passed between government and the private sector. The first railways in Tasmania were established by private companies. These companies did not prosper financially and the Government progressively took over their operations.

Between 1885 and 1938 the rail network (excluding the Melba Line) was owned by the State and operated as the Tasmanian Government Railways (TGR). Ownership transferred to the Tasmanian Transport Commission between 1938 and 1975 when, as part of a Commonwealth initiative to amalgamate Australia's railways into one entity, the Tasmanian Government sold the railway to the Australian Government. The Transport Commission operated the network between 1975 and 1978 on behalf of the Australian Government, who owned and operated it as part of the Australian National Railways Commission (ANRC) until 1997. In 1997 the Tasmanian Government resumed ownership of the rail land asset as a strategic corridor. Ownership of the fixed assets (rail track infrastructure) was severed from the land itself and sold by ANRC along with the business to the Australian Transport Network (ATN). The Tasmanian Government leased the land corridor to ATN. ATN continued to operate the business as ATN Tasrail, annexing the Melba Line through the purchase of the Emu Bay Railway Company (giving it access to Melba Flats on the west coast and the mineral concentrates traffic) and merged the two businesses.

In early 2004 ATN sold Tasrail to Pacific National, who in 2006 approached the Tasmanian Government for funding to continue operations. In June 2006, the Tasmanian and Australian Governments announced a joint "Rail Rescue Package" of funding over 10 years towards capital upgrades and track maintenance. In conjunction with the Rail Rescue Package, the rail network infrastructure (excluding the Melba Line) was transferred to the Tasmanian Government from Pacific National Tasmania on 1 January 2007 for $1 and declared open access under the *Trade Practices Act 1976* (Cth), making it available to third party rail operators. Under the terms of the Rail Maintenance and Management Deed (RMMD), PNT continued to have responsibility for managing and maintaining the asset for the term of the RMMD. PNT continued to privately own and operate the Melba Line without government assistance.

In 2008 Asciano Limited announced its intention to cease business operations in Tasmania and following a failed market sale process entered into formal negotiations with the Tasmanian Government to acquire its rail assets. In November 2009, the Tasmanian Parliament approved the *Rail Company Bill 2009*, establishing a new State-owned Company, TasRail to own and operate the rail network and to undertake train services. TasRail began operation on 1 December 2009.

Tasmanian Rail Network

The Tasmanian Rail Network consists of the railways defined in Schedule 1 Part 1 of the *Rail Infrastructure Act 2007,* being:

- Bell Bay Line (approximately 57 km running from the East Tamar junction to Bell Bay);
- Derwent Valley line (approximately 71 km running from the Bridgewater junction to the railyard west of Maydena known as the 'Florentine rail yard'). That part of the Derwent Valley Line running from Boyer to Maydena is currently non-operational.
- Fingal Line (approximately 55 km running from Conara Junction to Fingal);
- North-East Line (approximately 73 km running from Coldwater Creek junction to Tonganah). The North-East Line is currently non-operational.
- South Line (approximately 199 km running from the Hobart rail yard to Western junction).
- Western Line (approximately 259 km commencing at the Inveresk Railyard (the 2 km at the western end of the rail bridge on the North Esk River is non-operational) and running to Wiltshire via East Tamar and Western Junction). That part of the Western Line running from Burnie to Wiltshire (often described as the Wiltshire Line) is currently non-operational.
- Risdon Line (approximately 3 km running from Derwent Park to the former siding at the Risdon Smelter). The Risdon line is currently non-operational.
- The Melba (approximately 130 km running from the port at the City of Burnie to Melba Flats).
- The Hellyer Line (being the railway running from the Hellyer Mine site to the eastern boundary of the Melba Line at Moorey Junction). The Hellyer Line is currently non-operational.

The rail network dates from the late 1800's and its alignment has changed little since. The network is a single rail line, narrow gauge (1067 mm) transport system and consists of a total of 632 kilometres of operational lines and a further 213 kilometres of non-operational lines. The operational network (hereafter referred to as the rail freight network) extends from Hobart to Western Junction and then to Bell Bay Port in the north-east and to Burnie in the north-west. Connections are also provided to Fingal in the east and Boyer in the Derwent Valley. The Melba Line connects the west coast to Burnie.

The Land Corridor

The land corridor sits under the rail freight network and varies in width. As a general rule, the corridor is about one chain in width (1 chain = 66 ft or 20.12 metres). The land corridor is retained as Crown Land and leased to TasRail.

In addition, the Tasmanian Government identified the land corridor under the former rail line between Melba Flats and Zeehan as having potential future significance for the transport of mineral ore concentrates from the west coast. This land corridor will be preserved for consideration of future rail requirements in addition to the currently non-operational lines.

Track Capacity – Speed and Load Capacity

Track capacity (the length and weight carrying capacity of trains) is influenced by a number of factors. Significantly, Tasmania's difficult topography confines the speed and load capacity the rail freight network, particularly creating the need for steep gradients (up to 1:40) and tight curves.

The single line rail network means that trains running in opposite directions are limited by passing loops. Passing loops on the rail freight network are typically 850 metres to 900 metres in length. Maximum train lengths, and hence the capacity of the rail freight network, is partially controlled by the length of the passing loops. The size of arrival/departure sidings, the number of crossing loops along the track, and the relative location of the passing loops also impact on the track capacity.

There are around 280 level crossings on the rail network (of which 37 cross State roads) that impact on the travel speed of trains, particularly in urban areas. There is also a significant number of pedestrian and private crossings (both formed and unformed) used to access private land.

The design speeds of the rail network are very low compared to the road speed limits on the corresponding road network, particularly where the rail network mirrors the National Network (where speeds are typically 100km per hour for heavy vehicles). Rail speed limits are nominally 70km per hour; however, there are sections of the network that are much lower than this due to track condition (temporary restrictions) and/or track alignment (permanent restrictions).

Ultimately, it is the axle load restrictions that determine the carrying capacity of wagons. The axle load limit for the rail network is 18 tonnes, except for the Melba Line which is 16 tonnes.

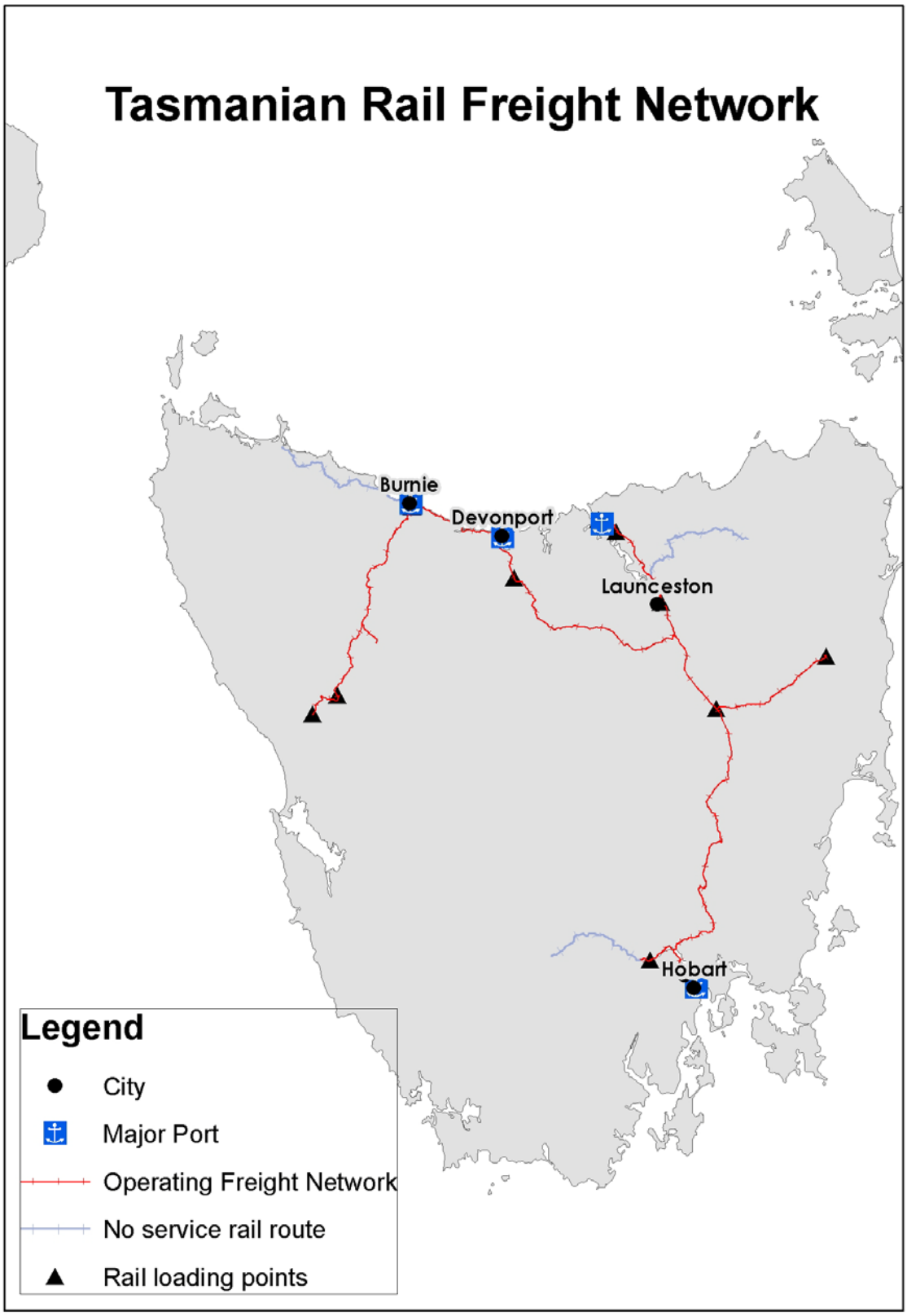
Train Capacity – Length and Frequency

Train capacity is further restricted by locomotive capacity and the scheduling of train services. While passing loops provide opportunity for trains to pass each other, the number of passing loops and their location will impact on train services particularly if a particular service has specific timing or priority requirements that require another service to wait in a passing loop. In these circumstances the full capacity of the rail infrastructure may not be realised.

Actual train lengths are further restricted by locomotive capacity. This is particularly the case with the steep gradient through the Rhyndaston tunnel.

It is the combined limitations of track and train capacity that currently restrict the efficiency and therefore productivity of rail transport.

Diagram 1: Tasmanian Rail Freight Network



Rail as a Component of the Land Transport Network

Duplication of the Road and Rail Infrastructure Network

The rail freight network is duplicated by the road network[1]. This means that rail has no unique markets, nor a geographic advantage in serving its markets; and faces strong competition from road transport. The National Road Network (Tasmania's part of the Australian Government funded National Highway) runs parallel to the rail freight network from Hobart to Bell Bay and from Western Junction to Burnie. The Murchison Highway (a State Road) duplicates the Melba Line point to point from origin to destination.

Ostensibly, for the contestable freight market, the duplicated road and rail networks provide competitive tension to facilitate efficiencies in each mode. However, at various locations the ability to increase capacity of the existing road and rail networks are limited by difficult terrain and infrastructure constraints.

Rail's Competitiveness in Freight Transport

The economics of rail freight transport, in worldwide terms, is generally that the greater the freight carried on a train and the longer the transit distance, the lower the unit cost (and therefore ability to price lower in the market). Operational costs per train service are generally fixed, with marginal costs of running a longer train over a longer distance relatively small. Rail is hampered by costs associated with double handling when freight is loaded to and from trains from heavy vehicles (known as transhipment or intermodal costs) and is better suited to moving freight from point of manufacture/production to direct point of delivery (usually a port).

Where a competitive freight task exists between road and rail, modal market share is not simply a matter of price. In the Tasmanian context, service characteristics such as consistency and reliability are strong determinants of customer modal choice, along with individual businesses logistics arrangements.

Competitive Neutrality

An efficient land transport system also requires competitive neutrality between road and rail transport. Ownership of a single operator monopoly rail network, in addition to the State road network, by the Tasmanian Government raises several competitive neutrality considerations. As a monopoly rail service operator and road and rail infrastructure provider operating in a duplicated land transport system, neutrality means:

- There is neutrality between the Government-owned above rail service operator and private sector road transport operators in terms of infrastructure access and pricing; and
- There is neutrality within government in respect of the land transport system, between road and rail infrastructure particularly in making infrastructure investment decisions.

It is the Tasmanian Government's policy position that, similar to road transport, rail services will be undertaken on a commercial basis.

An advantage of the duplicated road/rail network, applying the principles of competitive neutrality, is that capacity investment decisions can be based on a rational economic decision making process where mode is not necessarily important. For example, investment in increased capacity in the rail freight network has the advantage of minimising ongoing road maintenance costs and delaying capacity investment in road, where it is more costly to do so and vice versa. Rail also has the capacity to bypass road bottlenecks therefore reducing congestion.

[1] Movement of heavy vehicles through Latrobe limits viable road transport for cement from Railton to the Port of Devonport.

Current Role of Rail in the Freight Transport Task

In 2007/08 approximately 2.6 million tonnes of freight per year was carried on the rail freight network which represented 6.5% of the total State freight task. The freight transport industry often considers tonne kilometres as an industry measure. On this basis, approximately 409.6 million tonne kilometres was transported by rail in 2007/08 representing 13.5% of the total State-wide freight task.

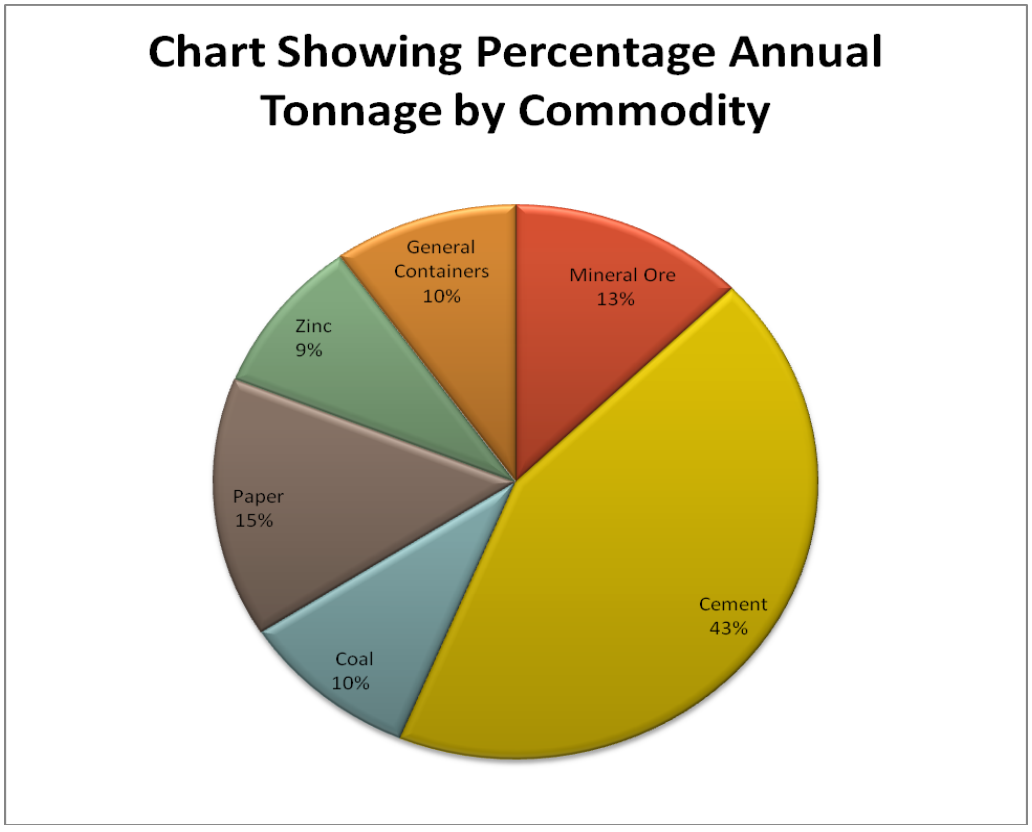
Rail freight operations are split into two broad markets: 'bulk' and 'intermodal'.

Bulk freight consists of cement (transported from Railton to Devonport), mineral ore concentrates (transported on the Melba Line) and coal (transported from Fingal to Railton). In 2007/08, bulk freight constituted approximately 1.74 million tonnes which represents 4.3% per cent of the total State freight task in terms of gross tonnage or 2.8% in terms of tonnes kilometres.

Intermodal freight consists of containerised goods – for example paper products, zinc ingots and retail products, primarily transported on the main north-south line between Hobart and the northern ports.

In 2007/08, intermodal freight constituted approximately 0.9 million tonnes per which represents 2.2% per cent of the total State freight task in terms of gross tonnage or 11.2% percent in terms of tonne kilometres.

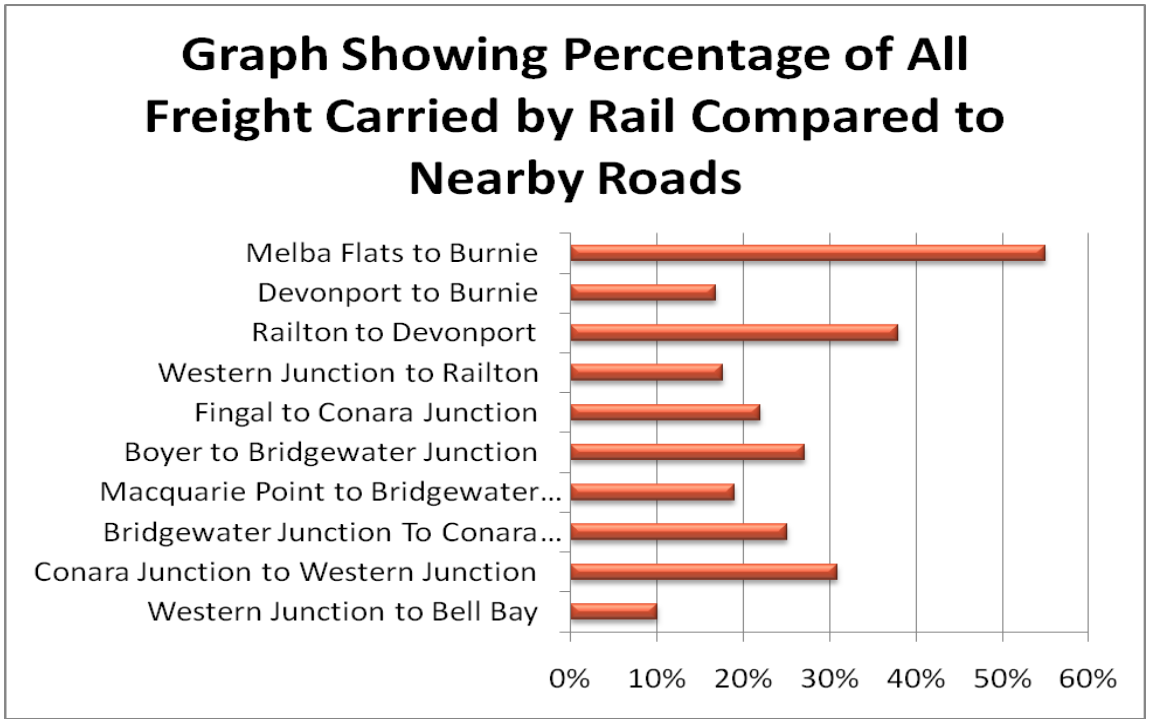
Typically, in Tasmania bulk freight is moved over shorter distances as is the case of cement from Railton to Devonport (21 km) and mineral ore West Coast to Burnie (average distance 112 km). The average distance which coal moves from the Final valley to either Railton or Burnie is approximately 200 km[2]. In contrast intermodal freight is often moved longer distances and from Hobart and Boyer to the ports of Burnie and Bell Bay. The average distance such freight moves has been calculated at approximately 335 km.



[2] Note that in early 2010 PaperLinx ceased operations in Burnie resulting in the coal task being reduced to Railton services only.

Future Freight Task and the Challenges for our Transport System

As discussed above, in tonne kilometre terms, freight transported by rail in 2007/08 represented only 13.5% of the total freight market. However, when comparing freight carried on rail and freight transported on major roads near rail, the effective market share for rail is closer to 25%. In considering this market share, it should be noted that since 2002/03 there has been a decline in freight carried by rail of around 20%. The loss of freight has been primarily associated with the loss of general container task and coal of which each has fallen by one third and the complete loss of logs and timber transported by rail.



The decline in rail freight transport is likely caused by a number of factors, including the independent business decisions of the former rail operator and customers, in addition to the decline in infrastructure reliability due to continued underinvestment. At the same, time there has been significant investment in the road network and improvements in higher productivity vehicle access has enabled continued productivity improvements for road transport. While using road transport offers speed and flexibility and lower associated costs, rail transport has a cost advantage when the freight task is of sufficiently large size to capture economies of scale. Rail is also more generally suited to tasks that are less time sensitive.

In planning to meet Tasmania's projected freight growth, the road and rail networks should not be considered in isolation of or in opposition to each other. Any land freight network must be thought of in holistic terms with freight being transported by either rail, road or in combination.

Further, co-ordinated intermodal investment is fundamental to improving the efficiency of freight transport in Tasmania. The proposed Bell Bay intermodal access upgrades (total project cost $9.1 million funded by the Tasmanian and Australian Governments and the George Town Council) will improve the efficiency and safety of operational access to wharf infrastructure facilitating a reduction in turn-around times of trains at Bell Bay. Similarly, the Brighton Transport Hub (total project cost $79 million) will be an integrated road/rail and road/road intermodal facility improving transport efficiencies. For rail, relocation of the southern terminal from Hobart Port to Brighton Hub will result in shorter and more efficient operations between Hobart and the northern ports.

Passenger Trains

In the past, heritage train operators (using heritage locomotives and rolling stock) have run occasional train services on the rail network. The Tasmanian Government has commissioned a Tourism Rail Strategy investigating the potential for brand-aligned heritage tourism experiences within the State. This would include tourist orientated passenger rail services operating on the rail network.

While infrastructure investment is prioritised on the current operational network, the investment profile is also prioritised to rehabilitate the capacity of the network to an appropriate freight standard (similar to road network guidelines, these are expressed in terms of travel speed, axle weight and train length). A higher quality of rail infrastructure and safe-working systems would be required for regular passenger services. For regular passenger services (particularly over longer distances), the capacity of the network in terms of travel time prohibits an effective service in both transport and cost terms. Due to these factors, there is currently insufficient demand to justify any regular passenger rail service. The cost of infrastructure and safe-working system upgrades to accommodate shorter travel times are significant and would need to be considered in balance with other transport options and supported by a cost benefit analysis.

Regulatory and Operating Framework

Rail Infrastructure Act 2007

The *Rail Infrastructure Act 2007,* which defines the rail network, sets out the obligations and responsibilities of the rail infrastructure manager in respect of the rail network and guides the relationship between the rail infrastructure manager and adjoining landowners.

Rail Safety Framework

The *Rail Safety Act 1997* establishes a regulatory framework for the safe operation of railways in Tasmania. This framework is based on a co-regulatory approach whereby each accredited railway is responsible for having the competence and capacity to manage the risk of running its railway as far as is reasonably practicable.

The Rail Safety Regulator is responsible for awarding rail safety accreditation and the ongoing monitoring of compliance against the requirements of the Act.

Rail Access Framework

In 2007, the rail network (excluding the Melba Line and workshop facilities at the Launceston terminal) was declared open access under Part IIIA of the *Trade Practices Act 1974 (Cth).* The RMMD prohibited the Crown from making any application to the National Competition Council (NCC) for the Melba Line to be declared open access. Following termination of the RMMD, the Tasmanian Government is able to make an application to the NCC in respect of the Melba Line if it considers it is prudent to do so.

In the interim, in November 2009 the Tasmanian Treasurer and then Minister for Infrastructure (as the Shareholder Minister's of TasRail) endorsed a transitional access framework to apply from 1 December 2009, including access prices to be charged. As far as practicable, the access arrangements agreed in the RMMD form the basis of the transitional arrangements as these constitute existing government policy. Access to the rail network by third party freight service operators will need to be on reasonable terms and conditions and be no more onerous than TasRail's operational use of the rail network.

Future Policy Considerations:

In conjunction with TasRail and other key stakeholders, further consideration needs to be given to:

- The explicit role of potential subsidies to rail infrastructure and possibly rail services; a framework for evaluation and monitoring subsidies and outcomes; and appropriate delivery mechanisms.

- Key performance indicators for rail infrastructure and rail services.

- The role of independent regulation in determining efficient infrastructure expenditure and access prices.

- The need to develop transparent access arrangements and charges for intermodal transfer (ports and Brighton Hub).

Tasmanian Railway Pty Ltd (TasRail)

TasRail is a State-owned Company established under the *Rail Company Act 2009* and operates the rail business on a commercial basis. TasRail owns, maintains and manages the rail network (operational and non-operational lines) and undertakes rail freight services. TasRail is responsible for providing access to the rail network to accredited third party access seekers and is the Track Infrastructure Manager for the rail network under the R*ail Infrastructure Act 2007 (Tas).*

Role of the Portfolio Minister and Treasurer

The Minister for Infrastructure (as Portfolio Minister) and the Treasurer are the Shareholder Ministers of TasRail.

Department of Infrastructure Energy and Resources (DIER)

DIER is responsible for:

- administering the *Rail Company Act 2009*, the *Rail Infrastructure Act 2007* and the *Rail Safety Act 1997*.

- providing independent transport planning and policy advice to the Minister for Infrastructure.

- providing independent advice to the Minister for Infrastructure on TasRail's business performance in achieving the Governments transport policy outcomes.

- administers on behalf of the Tasmanian Government the Australian Government's rail infrastructure funding under the Nation Building Program 2008-09 to 2013-14.

- the Rail Safety Regulator is responsible for accrediting rail operators. DIER (the Rail Safety Unit) is responsible for monitoring the safety performance of the rail industry.

Department of Treasury and Finance (Treasury)

Treasury is responsible for providing independent advice to the Treasurer on TasRail's financial performance including returns to government though dividends, income tax equivalents and guarantee fees, borrowings and capital investment by the company. Treasury is also responsible for advising the Treasurer on funding contributions requested by TasRail.

Investment in the Rail Freight Network

Existing network first

Historically, Tasmania's rail network has received limited investment compared to road. While privately owned and operated, infrastructure investment was considered a matter for the infrastructure owners. While under Commonwealth ownership between 1978 and 1997, rail modal share was protected under regulation resulting in a disincentive to invest in a productive and efficient infrastructure network. However, since the transfer of the rail track infrastructure (excluding the Melba Line) back to the Tasmanian Government on 1 January 2007, significant funding has been allocated to the entire rail network to address the deferred maintenance task.

Rail Rescue Package (excludes the Melba Line)

Following a request for funding from Pacific National Tasmania, the 'Rail Rescue Package' was announced in June 2006. Under the package, the Australian Government committed $78 million towards capital upgrades and the Tasmanian Government committed $44.8 million over ten years toward rail track maintenance. The Rail Rescue Package was administered under the RMMD. The capital upgrade funding is expected to be expended by the end of 2010.

National Building Program 2008-09 to 2013-14 (formerly the AusLink Agreement)

The Australian Government has committed $205.3 million to Tasmania's rail network under the Nation Building Program. This investment will fund the following projects:

- Rail Rescue Package $78 million
- Rail capacity improvements at Rhyndaston $24 million
- Upgrade of the Burnie to Western Junction line $28.9 million
- Upgrade of the Hobart to Western Junction Line $20.3 million
- Main north-south line rail capacity improvements $31.6 million
- Upgrade of the Fingal line $5.7 million
- Upgrade of the Boyer Line$1.1 million
- Upgrade of the Melba Flats to Burnie Line $15.7 million

In July 2009, funding previously allocated to the non-operational sections of the Derwent Valley and Wiltshire Lines was reprioritised in order to keep the core of the network, including the Melba Line, operational. Projects on the non-operational line have been deferred until after the existing operational network is strengthened.

Nation Building Economic Stimulus Program

The Australian Government has provided $3.9 million in funding for high risk rail crossings under the Nation Building Economic Stimulus Program for 13 locations across the State, 10 of which are on the Tasmanian Rail Network.

Tasmanian State Budget 2010-11 and Forward Estimates

In the 2010 State Budget, the Tasmanian Government committed $130 million over four years to upgrade rolling stock assets. At the same time, the Government committed $70.8 million over the same period towards maintenance and administration. This funding, in addition to ensuring the stability of continued business operations, will enable TasRail to upgrade and replace wagons and locomotives, implement a new positive train control system, undertake essential environmental and structural maintenance works on the Burnie Ship Loader and invest in new high-rail vehicles and workshop equipment.

Additional Infrastructure Funding

Infrastructure funding outside the existing Tasmanian and Australian Government commitments will be assessed by TasRail on a commercial basis. Where a project is not supported by a commercial model and if the project demonstrates broader economic value satisfying the Tasmanian Government's transport objectives, these projects will be evaluated within the land transport planning system and Government funding determined as appropriate within fiscal limitations.

Links to Key Strategies and Reform Processes

National Transport Policy Framework

In May 2008 the Australian Transport Council (ATC) agreed to develop a National Transport Policy Framework to underpin the development of reforms that will result in a more consistent approach to the regulation of transport modes and an investment and pricing framework that will provide better signals to guide both the supply and demand for transport infrastructure and services.

National Transport Commission Rail Productivity Review

In August 2009 the National Transport Commission (NTC) released the Rail Freight Productivity Review to the ATC. This Review focused on the investment and regulatory frameworks that underpin the rail freight industry to determine where these cause a barrier to rail businesses investing in more productive technology, assets and business practices. The review took into account the current road and rail reforms as agreed by the Council of Australian Governments (COAG).

The NTC's issues paper highlighted many issues and challenges that rail faces that are relevant in Tasmania. The key findings and recommendations of the Review, where applicable to the Tasmanian context, have been incorporated into the governance arrangements for TasRail, the investment framework and in developing the key objectives and priority areas identified in this Strategy.

Tasmanian Infrastructure Strategy

The Tasmanian Infrastructure Strategy guides future infrastructure priorities and decision-making for the planning, provision, use and maintenance of infrastructure in Tasmania. The Strategy sets out the vision for infrastructure in our key economic sectors of transport, water, energy and digital and acknowledges the central role the planning system plays in Tasmania.

The Tasmanian Infrastructure Strategy specifically acknowledges heavy reliance of the State economy on the ability of our transport system to move freight from producers to processors and on to markets – within Tasmania, nationally and internationally. The linkages to Tasmania's northern ports are critical as the departure points for the majority of the State's exports and entry point for imports. Efficient rail freight services play a key role in maintaining these links.

To this end, the Tasmanian Infrastructure Strategy identifies the Tasmanian Ports, Freight and Rail Strategies as key activities to complete alongside essential projects concerning maintenance and capital upgrades of rail infrastructure. Rail orientated projects highlighted in the strategy include:

- Committed rail infrastructure spending.
- Develop principles and objectives of a fair rail network access and a pricing framework.
- National rail productivity as well as safety reforms.
- Construction of Brighton Transport Hub.
- Realignment of rail at Bell Bay Port and potential Bell Bay intermodal expansion.
- Potential Burnie Port upgrade to prime bulk goods port with roll on roll off capacity.
- Access pricing based on costs associated with rail use.

- Investigate options to privatise above rail operations in the longer term.
- Objectives and actions to guide future priorities and decision-making.

Tasmanian Government Freight Strategy

The development of a state-wide freight strategy is identified as a priority project in the Tasmanian Infrastructure Strategy. This project will analyse the existing and future freight transport demand and identify targeted improvements to key freight networks across road, rail and port infrastructure. This will include a long-term infrastructure investment strategy to promote efficient freight transport including the relationship between road and rail infrastructure where the two networks coincide.

Tasmanian Framework for action on Climate Change

Tasmania has committed to reduce our greenhouse gas emissions to at least 60 per cent below 1990 levels by 2050. This target has been established in legislation through the *Climate Change (State Action) Act 2008*. Transport is one of the eight priority action areas to reduce emissions. It is also imperative that rail infrastructure planning and investment decisions consider the future impact of climate change on our environment.

The Tasmanian Government's Objectives for the Rail Freight Network

Safety: The safe operation and use of the rail network, including interaction with the broader community.

A safe transport system is the key priority for the Tasmanian Government. Rail services operate within a legislated safety framework established by the *Rail Safety Act 1997.*

The *Rail Safety Act 1997* promotes the safe construction, maintenance and operation of a railway as part of a national approach to rail safety regulation. All railway organisations in Tasmania are required to be accredited in accordance with the Act. This system of accreditation requires the railway to demonstrate that it has the competency and capacity to operate safely.

The Rail Safety Regulator is responsible for monitoring the safety performance of the rail industry and for conducting compliance audits and inspections.

Rail safety is a national transport reform priority area endorsed by the Council of Australian Governments (COAG). Along with other jurisdictions, DIER continues to work with the National Transport Commission towards the implementation of best practice model rail safety legislation that will form part of a system of nationally consistent rail safety laws and with the Australian Transport Council to establish a single national system for rail safety regulation and investigation by 2013.

Safe rail operations

The Australian and Tasmanian Governments funding commitments will improve the condition of the rail track and this should lead to a reduction in the incidence of infrastructure being a contributing factor to running line derailments.

The first priority for the newly established TasRail business has been safety with operation wide safety audits and implementation of resulting actions. A key safety initiative is the implementation of a positive train control system that utilises GPS technology to ensure that the location and progress of each train or track vehicle on the network is monitored. The Tasmanian Government provided funding in the 2010 State Budget forward estimates for this project.

Safe communities

A key element of rail safety is the safe interaction between road and rail at level crossings. Under the Australian Government's 'Nation Building and Jobs Plan', Tasmania has received funding of $3.9 million for safety improvements to 13 high risk rail crossings, 10 of which are on the Tasmanian Rail Network. Four rail crossing sites will be upgraded from Passive to Active Control, while another nine active control rail crossings will be augmented with Advanced Active Warning Systems.

Road safety benefits of rail transport

Safety benefits of rail, in terms of reduced truck numbers, are incorporated into the externality benefit that is the basis for the Tasmanian Governments contribution to rail maintenance funding under the Rail Rescue Package.

The Tasmanian Government's Objectives for the Rail Freight Network

Environment: A greater proportion of Tasmania's growing freight task is transported by rail.

Analysis suggests that rail is up to three times more fuel efficient, has less noise impacts and has greater safety outcomes than road transport. These societal advantages may be calculated as an externality benefit of rail transport over road transport that forms the basis of the Tasmanian Government's maintenance funding contribution to rail infrastructure under the Rail Rescue Package ($4 million per annum – excludes the Melba Line). The calculated value of the externality benefit quantifies values for gas emissions, road crash costs, air pollution, water pollution and noise.

It is acknowledged that the current state of the rail network has deteriorated following years of underinvestment by previous owners. This means that many of the environmental and safety benefits are not being realised as well as they could be. A priority action is the investment of committed funding by the Tasmanian and Australian Government's into the rail track infrastructure over the next five years.

Tasmania's Climate Change Targets

The Tasmanian Framework for Action on Climate Change targets reducing our greenhouse gas emissions to at least 60% below 1990 levels by 2050. This target is established in the *Climate Change (State Action) Act 2008*.

Rail as a viable alternative to road transport will take pressure off road use by higher productivity vehicles. Increased utilisation of rail to transport a greater proportion of the growing freight task, will contribute to Tasmania's emissions targets.

Mitigation and Adaptation – Infrastructure Investment

The impacts of climate change on our environment create new challenges around infrastructure planning and investment decisions. The predicted seasonal variations in Tasmania as a result of climate change include increases in annual rainfall on the west coast and central areas; temperature increases in the north east; and more frequent occurrences of extreme events such as flash flooding and heatwaves. These changes are likely to impact on rail infrastructure performance and durability, for example days of extreme temperatures are already a significant factor in buckling of rail track infrastructure and the north coast rail line is vulnerable to long term sea level rises.

The safe operation of the rail network is also important in reducing environmental impacts, particularly through damage and/or contamination arising from derailment events. The committed investment in the rail network is aimed at improving safety and has direct environmental benefits in this regard.

Future reviews of this paper will incorporate the results of the Tasmanian Government's interim emissions reduction targets by industry sector. It will also incorporate the Australian Government's emissions trading scheme once it is developed.

The Tasmanian Government's Objectives for the Rail Freight Network

Viability: A viable rail network for the long term.

The Tasmanian Government's vision is that rail is a viable option in the land transport system. A sustainable rail network for the long term means certainty of future rail track investment, efficient investment in rolling stock and certainty of demand from industry. Transport investment decisions need to take into account road and rail networks to find the best solution for the freight task.

A key priority is the utilisation of existing spare rail track infrastructure capacity

Better utilisation of rail track infrastructure spare capacity should reduce the cost of road maintenance and construction as freight that would otherwise be transported by road is transported by rail. A greater proportion of the freight task transported on rail will have direct environmental benefits through reduced greenhouse gas emissions and reduced externality costs.

Plan, deliver and fund network infrastructure in a timely manner

The Australian Government has committed significant funding to the Tasmanian Rail Network through the Nation Building Program 2008-09 to 2013-14. Projects funded through this program are identified on page 14 of this Strategy. It is anticipated that this project funding will be expended over the next five years, resulting in improved safety and reliability outcomes.

The Australian and Tasmanian Governments have jointly committed to strengthen the existing core network before starting on non-operational lines. TasRail may invest in additional projects on a commercial basis, where the cost of infrastructure investment is recovered from the market.

Rail network is available to third party train operators, including a pricing mechanism that is transparent in funding and charging. Rail customers should pay for use of rail just as road pricing include both access and utilisation charges.

In 2007, the rail network (excluding the Melba Line and workshop facilities at the Launceston terminal) was declared open access under Part IIIA of the *Trade Practices Act 1974 (Cth).* In November 2009 TasRail's Shareholder Minister's endorsed a transitional access framework to apply from 1 December 2009, including access prices to be charged.

An important component of an open access network is the transparency in infrastructure funding and recovery of costs from end users. It is important that access prices are set to ensure recovery of costs from the market as far as possible without making rail uncompetitive in the freight transport market. It is not appropriate or sustainable for governments to provide funding for costs which are appropriately borne by the market. Under the Transitional Access Framework, access prices do not recover from the market investment by the Tasmanian and Australian Governments.

Identify and protect freight network options where necessary to ensure future capacity, flexibility and certainty

TasRail is responsible for managing the non-operational lines and will be responsible for the reserved rail corridor between Melba Flats and Zeehan on the west coast. These corridors have been identified as having strategic value to the network and will be protected for future rail use.

Previously committed funding (dependent on a business case for the transport of logs by rail to the proposed pulp mill) has been redirected to the operational network to keep the core network open for use. Consideration of projects on the non-operational lines has been deferred until the existing network is strengthened.

Develop a reference framework (Tasmanian Freight Strategy) for investments made in the rail network

Future government investment in the rail network will be based on a cost benefit analysis across a broad range of economic, social and environmental criteria/considerations, rather than solely commercial criteria. Investment decisions should ultimately be based on competitive neutrality between road and rail to demonstrate that rail is not disadvantaged in comparison to road and vice versa.

The Tasmanian Government's Objectives for the Rail Freight Network

Economic Development: A cost effective and efficient transport system.

The Tasmanian Government's primary transport objective is to create a safe and efficient land transport system. This includes the integration of road, rail and intermodal transfer (either between road/rail or ports/road/rail). Improving the efficiency, reducing the cost of transport and ensuring access to larger interstate markets through ports is fundamental to supporting our economic growth and prosperity.

In Tasmania, the freight task is forecast to increase by approximately 1.8% per annum. Over 99% of Tasmania's export movements are by sea. Over the past two decades, the pattern of trade to and from Tasmania has changed. The three northern ports now account for the majority of the State's freight import/exports. Meeting the increase in the north-south and west coast freight tasks will require the optimal use of Tasmania's road and rail infrastructure, if productivity is to be maximised in the longer term. Long term improvements to rail infrastructure and intermodal facilities will provide rail with the potential to compete for a greater share of the contestable freight task on the north-south freight route.

Tasmania is a net exporter, with a significant focus on bulk commodities. Rail is a key mode in the intrastate movement of some bulk commodities (e.g. mineral ore concentrates and cement). It is critical in providing an alternative transport mode to road, supporting competitive transport options for both existing industries and potential major projects such as proposed mines and manufacturing facilities. Over the longer term, and as part of a strategic transport system, the Tasmanian Government considers rail to be an essential element in meeting the needs of Tasmania's growing freight task.

Transport productivity improvements are important in a value-add bulk commodity exporter such as Tasmania, particularly to the mining industry, where cost savings in the transport of goods increase the scope for competitive pricing. As an export oriented state, Tasmania faces major challenges in a carbon and oil constrained future due to distance from export markets and the cost of importing retail goods.

The proposed Bell Bay intermodal access upgrades (total project cost $9.1 million funded by the Tasmanian and Australian Governments and the George Town Council) will improve the efficiency and safety of operational access to wharf infrastructure facilitating a reduction in turn-around times of trains at Bell Bay.

Similarly, the Brighton Transport Hub will be an integrated road/rail and road/road intermodal facility improving transport efficiencies. For rail, relocation of the southern terminal from Hobart Port to Brighton Hub will result in shorter and more efficient operations between Hobart and the northern ports.

Upgrading the Tasmanian rail network

Significant historical underinvestment in the rail network has contributed to a loss in market confidence due to reliability issues. Maintaining a viable rail network is a key priority for the Tasmanian Government and is the basis for the 'existing network first' investment approach. The commercial benefits of this investment will accrue to rail freight demanders and associated environmental benefits of transporting freight by rail to the community as a whole.

Following the rehabilitation of the existing network, funding for network extensions or service improvements (primarily relating to travel time) will be subject to business case assessments.

It is important to understand that future track investment and the efficient investment in rolling-stock needed to improve rail efficiency is linked to market demand for rail, not only in terms of contestable volumes but also industry commitment through long-term service arrangements.

Optimise the efficiency of the land transport network

While some freight tasks are origin to destination (for example cement is transported on rail directly from point of manufacture to point of export), most are part of a broader land based logistics chain. With over 99% of the freight task either imported/exported by sea, and primarily through our three northern ports, an integrated land transport network is imperative to improve transport efficiency and underpin future economic growth.

This approach requires integrated transport infrastructure planning, investment and operation. Intermodal transfer hubs act as inland ports to facilitate cost effective and timely transfer between modes.

It is important that the Government plans for the future as well as making improvements for today. The non-operational lines will be managed by TasRail and re-opening will be considered based on business case.

Competitive neutrality between the road and rail networks

An efficient land transport system also requires competitive neutrality between road and rail transport. This means that there is neutrality between the Government-owned above rail service operator and private sector road transport operators in terms of infrastructure access and pricing; and there is neutrality within government in respect of the land transport system, between road and rail infrastructure particularly in making infrastructure investment decisions.

Objectives, Priorities and Key Initiatives

Objectives	Priority Areas for Action	Key Initiatives
Safety The safe operation and use of the rail network, including interaction with the broader community.	•Nationally consistent rail safety regulation. •Improved safety measures at railway crossings. •Implementation of positive train control.	*Complete:* •Nationally consistent rail safety legislation (*Rail Safety Act 1997*). •Independent Rail Safety Regulator. *Current:* •$3.96 million investment for high risk rail crossings across 13 locations, 10 on the Tasmanian Rail Network. •Significant investment in rail track infrastructure which will enhance safety outcomes. •Funding in the 2010 State Budget for positive train control. *Future:* •National Rail Safety Regulator by 2013. •National Rail Safety Investigator by 2013 •Monitor safety improvements.
Environment A greater proportion of Tasmania's growing freight task transported by rail.	•Rehabilitate the rail network to an appropriate standard to realise environmental and societal advantages of rail transport. •Reduced environmental damage and/or contamination resulting from derailment events. •Reduced greenhouse gas emissions in the transport sector by 2050. •Market environmental benefits to rail freight demanders.	*Complete:* •Recognising the environmental benefits of rail transport by basing rail maintenance funding under the Rail Rescue Package on externality benefits to the community. *Current:* •Infrastructure investment to enhance rail network safety and capacity improvements on the north-south line. •Planning and investment decisions that consider the future impact of climate change on our environment. *Future:* •Incorporate the Tasmanian Government's emissions targets for rail.

Objectives	Priority Areas for Action	Key Initiatives
Viability A viable rail network for the long term.	•Priority investment in existing operational network. •Utilisation of existing spare rail network capacity. •Deliver rail network funding in timely manner. •Open access network. •Transparency in funding and charging. •Protect rail network options to ensure future capacity and flexibility •Develop a land transport investment reference framework.	*Complete:* •Ownership and operation of the rail network and provision of train service by a State-Owned-Company. •Rail network is managed in accordance with the *Rail Infrastructure Act 2007* and the *Rail Company Act 2009*. •Rail network declared open access. •Transitional access framework endorsed. *Current:* •Nation Building Program project funding/Tasmanian Government funding under Rail Rescue Package. •Strategic non-operational lines and land corridors preserved. *Future:* •Determine future funding requirements and sources. •Develop Rail Access Framework.
Economic Development A cost effective and efficient transport system to underpin economic development.	•Competitive neutrality between the road and rail networks. •Optimise the efficiency of the land transport network. •Upgrading the Tasmanian rail network. •Investment in intermodal terminals to facilitate efficient freight transfer.	*Complete:* •Establishment of Tasmanian Railway Pty Ltd and acquisition of PNT's rail assets. •Rail network declared open access. *Current:* •Efficient funding for rail infrastructure and rolling stock. •Nation Building Program project funding/Tasmanian Government funding under Rail Rescue Package. *Future:* •Brighton Transport Hub and potential Bell Bay Intermodal expansion. •Develop Tasmanian Freight Strategy as investment framework in road and rail. •Development of Tasmanian Ports Strategy linked to the land transport network.

Measuring Objectives

Measure the progress towards achieving the objectives of this strategy to inform prioritisation and future reviews. Key performance indicators will measure performance towards outcomes on an annual basis.

Key Result	Measures of Performance
Improved rail safety and reliability.	Reduction in the number of network related occurances.
More freight carried by rail.	Increased tonnage, increased tonne kilometres and increase in contestable freight market share.
Improved network performance.	Closing the gap between design standard travel speeds and available travel speeds.
Transport infrastructure to deliver economic growth.	Increased rail's share of contestable freight market.

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