# Tasmanian Government's 2011 Submission to Infrastructure Australia

Department *of* Infrastructure, Energy *and* Resources

Tasmania
Explore the possibilities

Hon David O'Byrne MP
**Minister for Economic Development**
**Minister for Innovation, Science and Technology**
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Tasmanian Government

10 NOV 2011

Mr Michael Deegan
Infrastructure Coordinator
Infrastructure Australia
GPO Box 594
CANBERRA ACT 2600

Dear Mr Deegan Michael

I am pleased to present the Tasmanian Government's 2011 submission to Infrastructure Australia for your consideration and advice to guide further project development work.

The form of the submission has been determined following discussions with your staff and the Department of Infrastructure and Transport. These discussions indicated that the submission should include:

- An update on Tasmania's projects that are currently in the IA pipeline.
- A concept paper on projects that are under early consideration where that project is likely to entail funding greater than $100 million or it involves an innovative approach in a national context These projects are provided to IA specifically to elicit your advice on their merits and an appropriate approach for further development.
- Transport projects over a funding level of $100 million that will also be put forward under the Nation Building 2 Program.

In addition, in development of the package, there has been due consideration of IA's June 2011 report to the Council of Australian Governments "Communicating the Imperative for Action". The Tasmanian Government recognises the challenges the nation is facing in the provision of infrastructure to support future economic development and national prosperity. The central thrust of your report in relation to the critical need to improve infrastructure planning, policy development and project evaluation is supported.

In relation to an update on Tasmania's projects currently in the IA pipeline, the following are attached:

1. Bell Bay Intermodal Expansion Project – an update status report on this project which aligns with your theme for action of competitive international gateways.
2. Hobart – A World Class Liveable Waterfront City – an update status report on this project which aligns with your theme of transforming our cities.
3. An Innovation Strategy for Tasmania: Focus on Food Bowl Concept – an update status report on this project which aligns with your theme of adaptable and secure water supplies. This project also addresses the key future national challenge of food security.

4. Water and Sewerage Reforms – an update status report on this project which aligns with your theme of adaptable and secure water supplies.

The Department of Infrastructure and Transport provided advice that all projects with a potential cost greater than $100 million that are being considered for the Nation Building 2 Program should be submitted to IA for assessment and advice. In this context, the following is provided:

- A paper detailing the future strategic plan for the Midland Highway. This highway, with the Bass Highway, is the critical element of Tasmania's national freight and passenger transport road network. A long term strategic approach has been taken to address the future transport challenges and to determine priority projects. A Partnership Agreement with Councils adjacent to the highway has been developed. It can be viewed at - http://www.dpac.tas.gov.au/__data/assets/pdf_file/0017/146042/Midland_Highway_PA_December_2010.pdf

- A paper detailing the future strategic plan for the Brooker Highway. This highway is the northern gateway to Hobart and it performs an important freight and passenger transport role including facilitating commuter travel. A partnership agreement with all impacted Councils has been developed. This agreement outlines the transport challenges and the strategic directions and priority projects. It can be viewed at - http://www.dier.tas.gov.au/__data/assets/pdf_file/0011/57764/Brooker_Highway_Transport_Plan_Partnership.PDF

- A paper outlining a program for the revitalisation of rail in Tasmania. Tasrail is facing a significant challenge in relation to a capital upgrade to meet current and future demand for rail transport. In relation to the rail network on Tasmania's west coast, there is the prospect of a significant increase in mining activity which flows on to Australia's exports.

Finally, the package includes a submission outlining the challenge of passenger transit from Hobart's northern suburbs. A proactive approach is being adopted to the longer term strategic challenge of northern commuter transport to the Hobart CBD. To date, a business case has been undertaken on using an existing rail alignment for a light rail system. This challenge fits IA's theme for action of transforming our cities. This issue is provided to IA as a long term challenge for IA to provide critical assessment and advice on future transport planning and project development.

In conclusion, I would like to briefly outline to you the work the Tasmanian Government is undertaking to provide the strategic underpinning for future infrastructure provision, particularly in the transport sector.

The Tasmanian Infrastructure Strategy was released in February 2010. It provides the principles and directions to enhance infrastructure decision making in Tasmania. It also provides schedules and details on proposed infrastructure projects. The Strategy is internet based and it is updated regularly. It can be accessed at www.infrastructure.tas.gov.au.

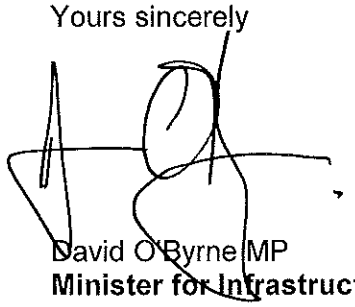
In relation to the transport sector, the Tasmanian Government has a range of strategic policy and planning frameworks in place. These can be accessed at www.dier.tas.gov.au/plans_and_strategy. Work is currently being undertaken on an integrated transport policy. This will provide the vision, objectives and policy directions for the transport system. It will provide the strategic underpinning for the transport submissions in this package that is being presented to IA. Work is well progressed with an expectation that an exposure draft will be released early in the New Year.

The other piece of work that is currently being undertaken that has relevance to the IA submission is the development of a Tasmanian freight strategy. Again, work is well progressed with a final release envisaged in July 2012.

As IA considers the Tasmanian transport challenges and projects, it is important that you are aware of the high level strategic thinking that supports the directions and projects. I would welcome IA's consideration of this strategic work.

The Tasmanian Government has considered IA's national challenges and themes for action in developing this submission. We look forward to working with IA on future development of our proposals.

Yours sincerely



David O'Byrne MP
**Minister for Infrastructure**

# INFRASTRUCTURE AUSTRALIA: PROPOSAL UPDATE

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|---|---|
| **PROJECT NAME:** | **Bell Bay Intermodal Expansion** |
| **PROPONENT ORGANISATION:** | Tasmanian Government and Tasmanian Ports Corporation |
| **CONTACT PERSON:** | Phil Cooke<br>General Manager Infrastructure and Maintenance<br>Tasmanian Ports Corporation<br>PO Box 478, Devonport, Tas, 7310 |
| **CONTACT EMAIL:** | philip.cooke@tasports.com.au |

**PROJECT UPDATE:**

Tasmania is reliant on port infrastructure with over 99 percent of total import and export freight tasks by volume being moved by sea. To maintain industry competitiveness this infrastructure is required to be reliable, maintain capacity for growth, have frequent shipping services and have efficient port and intermodal infrastructure. Currently this infrastructure has constraints and will have difficulty in meeting the industry requirements based on projected increases in freight over the next 20 years.

On this basis Tasports and the Tasmanian Government applied for funding from Infrastructure Australia (IA) in 2008 and provided project updates in 2009 and 2010. The Bell Bay Intermodal Expansion project was categorised by IA as a pipeline project that required more information prior to further consideration to fund the project. This was updated in IA's June 2010 report to a project with real potential.

Based on studies and the information that has been gathered on market drivers, Tasports updated the submission to IA in 2010 to modify the original proposal to a short and long term strategy focusing on immediate improvements through the Burnie Port and the long term objective of the Bell Bay development through a staged approach to construction.

The timing for the staged projects based on a projected growth rates are shown below:

- Stage 1 – Burnie Upgrades in 2011/12 (increased freight from 250,000 to 350,000 TEU's.
- Stage 2a – Bell Bay upgrades for removal of constraints 2018/2020 (increase freight from 150,000 to 200,000 TEU's).
- Stage 2b – Bell Bay upgrades for expansion 2020 to 2025 (increase freight from 200,000 to 400,000 TEU's).
- Stage 3 – Burnie upgrades for expansion (time frame to be determined based on requirement).

**Burnie**

Burnie port is a major bulk export port, handling high volumes of timber (woodchip) and mineral exports, including the high-value mining product from the West Coast. Burnie has the second largest share of freight at over 4.1 million tonnes or 29% of Tasmania's total. The Port handled 230,000 TEU in 2010/11, representing around 50% of Tasmania's container trade.

The port supports Toll's roll-on/roll off, Bass Strait container service. This container terminal is at capacity with Toll currently requesting more space due to increased container movements. This is due to Toll and ANL combining their operations in late 2009 through the Burnie port and the loss of the AAA service into Bell Bay. On this basis both Tasports and TasRail have been developing an overall master plan for Burnie and have developed an amended short term strategy to improve the port operational constraints whilst allowing for both container and bulk commodity growth and efficiencies within the rail infrastructure.

The Burnie port is intermodal and through optimisation of the use of the existing land area, will be able to support future growth of bulk commodities and in the short term container freight growth.

**Bell Bay**

For the Tasmanian government to achieve its goal of seamless movement of freight across modes through Bell Bay, it is necessary to achieve the following objectives:

- Facilitate regularly scheduled shipping services.
- To have an efficient and competitive port infrastructure.
- Have reliable express shipping services for time sensitive freight.
- To reduce rail unloading and loading times, improved train turn-around times of under 24hrs.

The outcome of the Bell Bay Intermodal Expansion, in conjunction with the improved efficiency of Burnie, will provide competition through the port and operators of the ports by providing more competition for contestable freight. With growth of the container freight in Tasmania, it will also be able to sustain two daily operations for freight movement.

**Port Strategy**

The objectives associated with the strategy are looking in the short term to improve the current constraints within the existing infrastructure. In particular Burnie Port initially was identified as being at capacity but through alterations based on a master planning exercise, the Port can be optimised to handle more freight. This would fulfil the short term requirement associated with the above objectives of security of shipping for cargo owners, improved efficiency and competitiveness of ports and improve the reliability of the Toll shipping services. In addition to this master planning for the port, rail operations have been reviewed to handle longer trains with less splitting of wagons to decrease the train turn-around time.

In the longer term, Burnie will have restrictions due to the urban encroachment on the site and this will feed into the longer term strategy of developing Bell Bay. It is estimated that Burnie through proposed expansions can handle up to 350,000 TEU's per annum. Based on this figure and a projected 3% growth, Burnie is predicted to reach capacity at approximately 2020.

The Devonport container market is expected to decrease due to its lack of rail on the eastern port and urban encroachment, with this trade either diverting to Burnie or Bell Bay.

The medium/longer term strategy is to develop Bell Bay port which can provide expansion of container freight from the current capacity of 150,000 TEU's to 400,000 TEU's per annum as shown in previous submissions. The initial infrastructure changes are expected to be needed for approximately 2018 when Bell Bay will reach its 150,000TEU capacity (based on a container service continuing to operate out of Bell Bay) but the staging of upgrade requirements can be amended based on previous submissions for the funding to be spread out over a longer time frame. This will improve the competitiveness of the container shipping market benefiting Tasmania producers.

Since the last submission in late 2010, Tasports has continued to develop an integrated Northern Ports strategy for Tasmania, recognising that the majority of Tasmania's imports and exports flow through the northern ports of Burnie, Devonport and Bell Bay

Over the last 12 months, a number of issues have impacted on freight to and from Tasmania and have had a bearing on the projected capacity of the Northern Ports. These include:

- The loss of all container services into the Port of Bell Bay.
- Flat growth in the Tasmanian container market.
- Increased freight costs for customers resulting from the need to tranship containers through Melbourne.
- Loss of export woodchip volume due to the forest industry restructure.

The current freight volumes through the Ports are within the current Ports capacities and the commercial arrangements currently in place support the strategy of short term development at Burnie with a future Bell Bay development. The long term strategy of upgrades to the Bell Bay intermodal facilities will support an increase in capacity at Bell Bay, making a significant contribution to meeting Tasmania's medium-term container growth forecasts.

In the short term, the loss of a container service into Bell Bay, while significant, will not decrease the importance of the Port. Current long term Bell Bay customers include metals and materials through Rio Tinto Alcan and Temco, fuel supplies and woodchips. These imports/exports are less affected by the loss of the container service, and will continue to utilise the port. Other prospective port customers, including coal developers are exploring the potential to ship product out of Bell Bay.

Discussions have commenced between Tasports, TasRail and Burnie customers to proceed with the initial stages of the Burnie optimisation project to accommodate the short term shift in volume from Bell Bay to Burnie.

During the next 12 months, the work that Tasports will undertake to further the Bell Bay Intermodal Development will include:

- Further review of the Tasmanian freight market to refine expected Port volume projections.
- Refinement of the Bell Bay Intermodal Development engineering estimates for a staged construction project.
- Development of the business case for the Bell Bay project.

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| **Pipeline category nominated by proponent:** | Real Potential | |
| **Capital Cost of Initiative by Proponent ($M, nominal, undiscounted):** | Bell Bay Stage 1: | $56 million |
| | Bell Bay Stage 2: | $25 million |
| | Bell Bay Stage 3: | $55 million |
| | Bell Bay Stage 4: | $14 million |
| | Total: | $150 million |
| **BCR by Proponent excluding Wider Economic Benefits:** | The preliminary BCR is 1.6. Final BCR is to be determined following comprehensive re-evaluation of existing analysis and confirmation of assumptions through investigative studies | |

# INFRASTRUCTURE AUSTRALIA: PROPOSAL UPDATE

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|---|---|
| **PROJECT NAME:** | **Hobart: A World-Class, Liveable Waterfront City** |
| **PROPONENT ORGANISATION:** | Department of Economic Development, Tourism and the Arts |
| **CONTACT PERSON:** | Elizabeth Jack<br>Deputy Secretary, Culture Recreation and Sport<br>GPO Box 646, Hobart, Tas 7001 |
| **CONTACT EMAIL:** | elizabeth.jack@development.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 5820 |

**PROJECT UPDATE:**

The *Hobart: a world-class, liveable waterfront city* submission (the submission) has been assessed by Infrastructure Australia (IA) as seeking to address a significant national issue and is currently at the Early Stage in the IA assessment process.

Following the initial submission in 2009, an update was provided to IA in 2010 advising that benefit cost analysis (BCA) work had been commenced in support of the submission. This BCA work initially focussed on stage one of the submission, which relates to critical inner port developments, including:

- a $10 million redevelopment of Macquarie Wharf No. 2 Shed to provide new freight storage and handling facilities for the Australian Antarctic Division and the French Antarctic programs;
- a new international cruise ship terminal;
- redevelopment of the Brooke Street pier domestic ferry terminal;
- wharf infrastructure upgrades; and
- work towards further development of the capabilities of the Antarctic Airlink service operating out of the Hobart International Airport.

This BCA work must now be advanced with the incorporation of the redevelopment of the Macquarie Point railyards, the second key stage in the development.

With the Macquarie Point railyards to be vacated around September 2012, the Tasmanian Government is in a position to review and consider the future development of this site. Not only is this 8.4 hectare site an integral element of the IA submission, its location on the doorstep of the city of Hobart will enable it to play a major role in the city's future growth and development.

The site also represents an important opportunity to further a number of other important development objectives, such as continued growth and development of the Antarctic sector and the

science and research programs serviced from Hobart, promotion of inner city living and growth and development of Hobart's cultural precinct.

The Department of Economic Development, Tourism and the Arts (the Department) has commenced the second phase of the BCA work to support the submission. A project steering committee, consisting of the State Architect and senior executives from Tasports, the Hobart City Council and the department, has been formed to guide this next phase. These representatives have been selected to ensure there is a broad representation of the potential values and drivers for the future development of the railyards site.

The second phase of the BCA work will support the development of a more comprehensive understanding of the economic benefits of the railyards site redevelopment, its role in the future development of the city of Hobart and the IA submission more generally.

The work will be complemented by a program of consultation with key stakeholders, including the Hobart City Council, the Sullivans Cove business community, Tasports, Antarctic enterprises, the University of Tasmania, Housing Tasmania and the arts and cultural communities. This consultation process will focus on developing an understanding of the development opportunities and potential synergies the site presents.

It is anticipated that completion of the final stages of the IA process will involve detailed design, engineering and risk assessment work to present a 'ready to proceed' proposal for IA's consideration, and that this will require a significant financial commitment from the Tasmanian Government. The planned BCA work and consultation process will assist the Tasmanian Government in making decisions on the financial commitment required.

Once the BCA work is completed, preliminary advice will be provided to the Tasmanian Government on development options for the site. This is expected to occur in mid to late 2012, at which time State Cabinet will be required to determine what level of financial commitment can be made to complete the required detailed design, engineering and risk assessment work to support a final submission to IA.

In the meantime, several important developments have been and are continuing to be progressed by the Tasmanian Government since the last IA submission update. These are noted below.

1. Tasports has now committed to expending $7 million on upgrading the Macquarie Wharf No. 2 Shed to provide contemporary port-side storage and handling facilities for the Australian Antarctic Division and French Antarctic programs. These new facilities will be complemented with a new international cruise ship terminal to support the growing number of international cruise visits to Hobart.

   It should be noted that Tasports' Macquarie Wharf No. 2 Shed upgrades – while focussed on supporting the needs of the Australian Antarctic Division, French Antarctic Programs and the international cruise industry – are on a significantly smaller scale than those proposed as part of the IA submission, which focuses on developing a much more substantial facility with the capacity to attract other east Antarctic nations to operate out of Hobart. This would include additional office and logistics space, and interpretation facilities showcasing Australia's long and continuing role in the Antarctic and southern ocean. While Tasports will shortly begin work on the $7 million upgrade, the design will have the capacity to further expand the facility to incorporate the developments proposed in the IA submission. Should these developments proceed, they will – along with further development of the Antarctic Airlink – increase Hobart's capacity to greatly expand its role as an international Antarctic gateway.

2. The development of the University of Tasmania's (UTAS) Institute of Marine and Antarctic Studies (IMAS) is now underway, with the demolition of Princes Wharf No 2 Shed almost completed, and construction of the new facility due to commence before the end of 2011. The State Government's transfer of this key parcel of Crown land and a prime waterfront development site to UTAS to support the project will deliver a further expansion and recognition of Tasmania's international role as a critical centre for Antarctic science and research.

3. On 21 October 2011, the Minister for Economic Development released the Tasmanian Antarctic Sector Development Plan. This document provides an action plan to help guide the efforts of the Tasmanian and Australian governments, Tasmanian Polar Network member businesses, and the wider Antarctic fraternity in fostering the growth and development of business opportunities and support services associated with Antarctic science, research and resource management.

4. In May 2011, the Tasmanian Government also completed the $15 million redevelopment of Princes Wharf No.1 Shed, which has been designed as a major commercial and community event facility. This is expected to play a significant role in the future development of the Hobart waterfront as an important cultural hub, contributing to the location's activity and vibrancy, its community engagement and attraction, and to the overall Tasmanian brand.

5. Tasports is also now in the midst of an Expression of Interest process to select a preferred tenderer for the redevelopment of Macquarie Wharf No. 1 Shed. This is expected to result in significant private investment in the accommodation, tourism and cultural assets on Hobart's waterfront.

6. As with other state and territory governments in Australia, the Tasmanian Government is working with the Hobart City Council and other councils in the greater Hobart metropolitan area to develop a Capital City Strategic Plan (plan). The plan, once developed, will inform the future strategic direction of the city's growth and development over the next 30 years. A number of strategies, plans and policies are being used to inform the overall plan, one of which is the *Hobart: a world-class, liveable waterfront city* submission; further indication of the both local and state government's commitment to the submission.

Not only will these developments have a significant impact on Hobart's waterfront and its important Antarctic role, but they will also link closely with the future development of the Macquarie Point railyards, playing a major role in the future growth and development of Tasmania's capital city.

As was the case with the initial BCA work that has been done in relation to this submission to date, the department will continue to work very closely with officers from IA to ensure the BCA work is undertaken to an appropriate standard, ensuring the final submission presents a cogent case for consideration by the Infrastructure Australia Council.

# INFRASTRUCTURE AUSTRALIA: PROPOSAL UPDATE

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|---|---|
| **PROJECT NAME:** | **An Innovation Strategy for Tasmania: Focus on Food Bowl Concept** |
| **PROPONENT ORGANISATION:** | Department of Primary Industries, Parks, Water and Environment |
| **CONTACT PERSON:** | John Wittington, Deputy Secretary |
| | GPO Box 44, Hobart, Tasmania, 7001 |
| **CONTACT EMAIL:** | John.Whittington@dpipwe.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 3028 |

**PROJECT UPDATE:**

While the submission provided to IA, in relation to Irrigation Development across the State remains unchanged, there have been significant developments since the draft proposal was submitted.

In particular, the three Government-owned Irrigation businesses have merged into a single State-owned Company, namely Tasmanian Irrigation Pty Ltd. This merger occurred on 1 July 2011, and aims to ensure that irrigation development and operations are provided efficiently and effectively.

The key activities for Tasmanian Irrigation during 2011-12 involve:

- 'Bedding down' the merger and ensuring that the benefits of a single State-owned Company are realised;
- Commencing the operations of three new irrigation schemes that have been developed over the past 18 months;
- Completing the construction of one scheme;
- Obtaining final approvals and commencing construction for two schemes;
- Completing detailed Business Cases for two schemes;
- Completing 'Preferred Option' studies for four schemes (a process which occurs prior to undertaking detailed Business Cases); and
- Undertaking 'Prefeasibility Studies' for two schemes.

The attached document provides a detailed update of the stages that various irrigation projects are up to.

It is anticipated that the Tasmanian Government will be in a position to provide more detail on the next stage of irrigation development projects across the State, in the second half of 2012.

# TASMANIAN IRRIGATION PTY LTD
# PROJECT REPORTING TEMPLATE : October 2011

| PROJECT NAME | COST | RISKS | TIMELINES | OTHER COMMENTS |
|---|---|---|---|---|
| Winnaleah Irrigation Scheme Augmentation | • $10.8m | • Wet weather impacting construction (decreasing) | • Under construction<br>• Construction scheduled for completion February/March 2012 | • Frome Dam to fill during winter 2012 to enable water delivery during 2012-13 irrigation season. |
| Lower South Esk Irrigation Scheme | • $12.7m | • Finalisation of CEMP and outstanding European heritage (decreasing)<br>• Finalisation of landscape monitoring plan under *EPBC Act* (steady) | • Project well advanced in Approvals stage<br>• Construction start is imminent. | • This project is one component of Tasmanian Irrigation's program to irrigate the midlands. (See below, Midlands water Scheme – Arthurs Pipeline.) |
| Midlands Water Scheme – Arthurs Pipeline | • $88.15m (in 2008-09 dollars) | • Commitment to water entitlement take-up (steady)<br>• CEMP finalisation and ACDC approvals (reducing)<br>• Finalisation of landscape monitoring plan under *EPBC Act* (steady) | • Project in the late Approvals stage<br>• On schedule for construction start mid-2012 | • This project is the major component of Tasmanian Irrigation's program to irrigate the midlands. (See above, Lower South Esk Irrigation Scheme.) |
| South East Irrigation Scheme | • $39.9m | • Cost of water entitlements may deter local buy-in (steady)<br>• Open market interest (steady) | • Project in Feasibility stage<br>• Business Case scheduled for July 2012 | • Scheme costs are suitable for high value horticultural uses but too expensive for the water to be used on the lower-value broad acre operations which characterise the region currently outside of the Coal River valley. |
| Shannon Clyde Irrigation Scheme | • Budget estimate – being developed | • Water management issues in region requiring resolution (decreasing) | • Development of new preferred option, scheduled for April 2012 | • The original Shannon Clyde project was parked due to external factors preventing the project moving ahead.<br>• The project has recommenced, and will be based on the most recent firm expressions of interest of approx. 5,000 ML. |
| Suite of North East Irrigation Schemes | • Upper Ringarooma Irrigation Scheme (URIS) – $31.2 m<br>• Great Forester Brid Irrigation Scheme (GFBIS)– est. $42 m | • URIS - Overstatement of water demand (decreasing)<br>• GFBIS – Determining supply option/s at 95% + reliability (steady) | • URIS in Feasibility stage. Business Case scheduled February 2012.<br>• GFBIS in Prefeasibility stage. Preferred Option scheduled during the first half of 2012. | • Scope of URIS project being progressed is based on results of a second EOI round to confirm demand<br>• GFBIS in early Prefeasibility stage. |
| Suite of Forth Irrigation Schemes | • Kindred North Motton Irrigation Scheme (KNMIS): $10.6m<br>• Don Sheffield Irrigation Scheme (DSIS) - $11.8m. | • KNMIS – entitlement take-up (steady)<br>• DSIS – landholder awareness (steady) | • KNMIS Business Case approval expected to be imminent.<br>• DSIS Preferred Option scheduled March 2012 | • KNMIS water sales scheduled for Nov-Dec 2011<br>• DSIS originally conceive as separate projects for the Don-Forthside district and the Sheffield Melrose district now being progressed as one project. Project in very early Prefeasibility stage. |
| Dial Blythe Irrigation Scheme | • $12 m | • Ensuring 95% + reliability of water source/s (decreasing) | • Project is in late Prefeasibility stage.<br>• Preferred option scheduled for December 2012. | • The most recent of the projects given to TI to investigate.<br>• Highly productive and knowledgeable district. |

DATE COMPLETED: October 2011

# TASMANIAN IRRIGATION PTY LTD
# PROJECT REPORTING TEMPLATE : October 2011

| PROJECT NAME | COST | RISKS | TIMELINES | OTHER COMMENTS |
|---|---|---|---|---|
| St Pauls catchment (formerly Meadstone) | • TBA. | • Higher grade agricultural and water demand patchy (steady) | • Early Prefeasibility stage | • TI will not proceed with the Meadstone Dam proposal as originally referred for investigation |
| Swan Valley Irrigation Scheme | • TBA | • T.B.A. | • Early Prefeasibility stage | • Hydrological assessment of the Swan River proceeding. |
| **PROJECTS COMPLETED: TRANSITING TO ON-GOING OPERATIONS** | | | | |
| Whitemore Irrigation Scheme | • $11.5m | • Post commissioning and defects liability period (reducing) | • On schedule for inaugural irrigation season commencing 1 November 2011 | • The scheme will commence operation under TI management |
| Headquarters Road Dam | • $6m | • Post commissioning and defects liability period (steady) | • On schedule for inaugural irrigation season commencing 1 November 2011 | • The scheme will commence operation under TI management<br>• Farm Water Access Plan preparation underway |
| Sassafras Wesley-Vale Irrigation Scheme | • $11.9m | • Post commissioning and defects liability period (steady) | • On schedule for inaugural irrigation season commencing 1 November 2011 | • The scheme will commence operation under TI management<br>• Farm Water Access Plan preparation underway |

**OVERVIEW OF TASMANIAN IRRIGATION**

**Background**

- The Tasmanian Irrigation (TI) Pty Ltd was established as a State-owned company on 1 July 2011 AS THE SOLE Tasmanian Government entity responsible for irrigation development and operation. It merges the assets and responsibilities of the former Rivers and Water Supply Commission, and the Commission's former subsidiaries: Tasmanian Irrigation Development Board Pty Ltd and Tasmanian Irrigation Schemes Pty Ltd.
- Schemes developed by TI are constructed as public-private partnerships. The public subsidy towards scheme capital costs comes from a pool of $220 million set aside for the purpose by the Commonwealth ($140 m from the *Water for the Future Fund*) and the State ($80 m from the *Water Infrastructure Fund*). The private contribution to capital costs is via the purchase of fully tradeable water entitlements to particular schemes. There is no public subsidy for operating costs which are fully met by annual charges on the holders of water entitlements.

DATE COMPLETED: October 2011

# TASMANIAN IRRIGATION PTY LTD
# PROJECT REPORTING TEMPLATE : October 2011

**ATTACHMENT A**

**PROJECTS UNDER DEVELOPMENT**

Winnaleah Irrigation Scheme Augmentation (WISA)

**Background**
This project augments the existing Winnaleah Irrigation Scheme with an additional 3,700ML of water to take the scheme's total licenced capacity to 6,950 ML and extend its irrigable area to a total of approximately 4,500ha.
**Current Status**
Under construction

Lower South Esk Irrigation Scheme

**Background**
The Lower South Esk Irrigation Scheme is based on extraction of winter flows held in a 6,000 ML off-stream storage for later release during the growing season. The storage will supply 5,200ML to an irrigable are of about 9,000ha extending north from the Conara region.
**Current Status**
Final regulatory approvals being obtained. Construction is imminent.

Midland Water Scheme – Arthurs Pipeline

**Background**
The Midlands Water Scheme designed to deliver 38,500ML of irrigation water annually to an irrigable area of 55,684ha stretching from near Campbell Town to as far south as Kempton.
**Current Status**
The MWS is obtaining final regulatory approvals and undergoing the open market sales process.

South East Irrigation Scheme

**Background**
The South East Irrigation Scheme is designed to supply 5,000ML (upgradeable to 10,000ML at additional cost if future demand warrants) ) to an irrigable area of more than 20,000ha extending from just north of Hobart, through the Coal River valley, to Orielton, Sorell and as far as the Forcett area.
**Current Status**
The Preferred Option has been presented and the Business Case is currently being prepared.

Shannon Clyde Irrigation Scheme

# TASMANIAN IRRIGATION PTY LTD
# PROJECT REPORTING TEMPLATE : October 2011

**Background**

The project as originally conceived was parked due to a range of external factors relating to wider water management issues that prevented the project moving forward. The project is now re-activated following advice that substantial action is underway to resolve these issues.

**Current Status**

A review of work undertaken to date has indicate a prospective Preferred Option which would answer the expressed firm demand for additional water from the district.

North East catchments

**Background**

The project as referred to TI was for a series of specific large in-stream dams. The project has been brought into line with TI methodology which commence with land capability assessments and expressions of interest for new water, and then investigate water delivery options, to develop scoped and costed preferred options.

**Current Status**

- The Upper Ringarooma Irrigation Scheme (URIS) is furthest developed. The Preferred Option is being refined following irrigator feedback and a new EOI. The project's Business Case is being developed on the basis of a storage in the headwaters of the Ringarooma catchment of two different sizes.
- The Preferred Option for the Great Forester Brid Irrigation Scheme (GFBIS) is being developed. EOI's have been received from the region and various water sources are being investigated.

Forth Irrigation Schemes

**Background**

The Forth Irrigation Schemes are based on drawing water from the Forth River to supply a total of up to 12,000ML to an irrigable area of up to 15,000ha.

**Current Status**

- The Kindred North Motton Irrigation Scheme is furthest advanced. The 2,500 ML project servicing 1,000 ha of irrigable land will move to water entitlement sales following approval of the project Business Case, expected to be imminent.
- Irrigation to the Forthside Don and Sheffield North Motton districts will be progressed as one project: a Don Sheffield Irrigation Scheme (DSIS) to deliver up to 9,000 ML. A DSIS irrigator group was only recently established and the demand survey is yet to be completed.

Dial Blythe Irrigation Scheme

**Background**

The project is being designed to deliver 3,000ML to a 4,000ha area of outstanding soils in the highly productive district in the hinterland between Heybridge and Penguin.

**Current Status**

This project is progressing well through the Prefeasibility Stage.

# TASMANIAN IRRIGATION PTY LTD
# PROJECT REPORTING TEMPLATE : October 2011

St Pauls catchment (Meadstone Dam)

**Background**
The original proposal referred for investigation was a dam in the headwaters of the St Pauls River (below Meadstone falls). This would have required a large dam with a capacity of up 30,000 ML for a moderate annual yield, directly impacting project feasibility. Alternative proposals may be feasible depending on size and location of demand and land capability.
**Current Status**
Early Prefeasibility stage.

Swan River Irrigation Scheme

**Background**
Early investigation suggests a development of 3,000 ML.
**Current Status**
Very early Prefeasibility stage.

**COMPLETED PROJECTS**

Whitemore (WIS)

**Background**
The $11.3m Whitemore Irrigation Scheme will deliver 5,500ML of water to about 12,000ha of farmland stretching from near the foot of the Western Tiers to just north of the Bass Highway near Carrick. Water will be delivered from 8 November 2011.
**Current Status**
Pipeline installation, pump-houses and an in-scheme 92 ML holding dam have been completed.

Headquarters Road Dam

**Background**
Headquarters Rd Dam near Scottsdale will deliver 1,980ML to an irrigable area of 1800ha along the Great Forester River nearly as far as the coast east of Bridport.
**Current Status**
This dam is complete and has water in storage for delivery during the 2011-12 irrigation season.

Sassafras Wesley Vale Irrigation Scheme

**Background**
The Sassafras Wesley Vale Irrigation Scheme has undergone Commonwealth assessment as a Controlled Action through the processes of the *Environment Protection and Biodiversity Conservation Act.* The scheme is designed to deliver 5,460 ML to 10,650ha of farmland extending from Devonport to almost Port Sorell and down to Latrobe.
**Current Status**
Construction is complete and water will be delivered for the 2011-12 irrigation season from 8 November 2011.

# INFRASTRUCTURE AUSTRALIA: PROPOSAL UPDATE


| | |
|---|---|
| **PROJECT NAME:** | **Water and Sewerage Reforms** |
| **PROPONENT ORGANISATION:** | Department of Treasury and Finance |
| **CONTACT PERSON:** | Chris Lock<br>Director, Economics and Financial Policy Division<br>GPO Box 147, Hobart, Tas, 7001 |
| **CONTACT EMAIL:** | chris.lock@treasury.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 2646 |


**PROJECT UPDATE:**

While the revised submission provided to IA, in May 2011, in relation to *Tasmania's Water and Sewerage Reform* remains unchanged, there have been significant developments in the progress of water and sewerage reform in Tasmania since the draft proposal was submitted.

- The Government has introduced a fully independent licensing framework for the sector. On 1 July 2011, the Tasmanian Economic Regulator issued licenses to the three regional water and sewerage corporations. Up until July 2011, the sector was operating under an interim licensing arrangement.

- The Government released the *Water and Sewerage Industry (Pricing and Related Matters) Regulations 2011*, with the regulations providing the regulatory framework which the Office of the Tasmanian Economic Regulator (OTTER) must take into account when making and Price and Service Plan determination.

- Following release of the *Water and Sewerage Industry (Pricing and Related Matters) Regulation*s, OTTER has released the Price and Service Plan Guideline which includes detailed requirements that the water and sewerage corporations' proposed price and service plans must comply with as well as information on how and when the price determination investigation will be conducted.

- The water and sewerage corporations are preparing the first Price and Service Plans. The Plans (which include proposals for Operational Expenditure, Capital Expenditure, Maintenance and Renewal Expenditure, and Tariffs) are to be submitted to the Economic Regulator by November 2011 and the first Price Determination Period is to commence on 1 July 2012, for a three year period.

- OTTER has released the Water and Sewerage Industry Reporting Guideline following public consultation. The Guideline outlines the annual performance and information reporting requirements of the regional water and sewerage corporations.

- A number of legislative and regulatory amendments have been made to improve the economic regulatory framework for the States water and sewerage sector.

# INFRASTRUCTURE AUSTRALIA: APPLICATION FOR ELIGIBILITY FOR ASSESSMENT

| | |
|---|---|
| **PROJECT NAME:** | **Midland Highway – Rural National Network** |
| **PROPONENT ORGANISATION:** | Department of Infrastructure, Energy and Resources |
| **CONTACT PERSON**: | Peter Todd<br>General Manager, Roads and Traffic Division<br>GPO Box 936, Hobart, Tas 7001 |
| **CONTACT EMAIL:** | Peter.Todd@dier.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 6361 |

**PROJECT DETAILS:**

**Problem being addressed**

The Midland Highway is part of the National Land Transport Network (National Network) in Tasmania, an integrated network of land transport links within national and inter-regional land transport corridors that are of critical importance to national and regional growth.

The Highway is classified as a Category 1 Trunk road in the Tasmanian State Road Hierarchy and connects southern Tasmania and Hobart with northern centres and Tasmania's main export ports. It is Tasmania's key north-south road connection.

The links in the National Network support the movement of goods and people between the three major urban centres of Hobart, Launceston and Devonport-Burnie, industrial areas and the ports of Hobart, Burnie, Launceston (Bell Bay) and Devonport.

In 2009 the Tasmanian State Government joined with Local Government Authorities along the Midland Highway to develop the Midland Highway Partnership Agreement (copy attached); a plan for future investment in and operation of the highway.

The vision, actions and priorities contained in the plan are focussed on four key objectives:

- Road-user safety;
- Improved freight efficiency;
- Travel reliability on the urban approaches; and
- Asset performance.

**Objective: Road User Safety**

Road safety improvements have been identified from analysis of crash patterns on the Highway and have been integrated within the staged approach to capacity improvements. The identified projects/treatments address the specific types of crashes occurring on the highway and reduce the potential for future crashes by:

- Improvement of horizontal and vertical geometry.

- Separation of opposing traffic through use of flexible barriers to eliminate head on crashes and reduce severity of loss-of-control crashes.

- Providing consistent road cross section and sealed shoulders to reduce the occurrence of loss-of-control crashes.

- Upgrading of deficient junctions to provide consistency and minimise potential for vehicle conflict.

- Reduction in incidence and severity of loss-of-control crashes through improving sight distance, delineation, and protection of roadside hazards.

**Objective: Asset Performance**

Asset restoration priorities are based on providing a sound road pavement and surface reflecting the role, function and traffic volumes of this section of the National Land Transport Network in Tasmania by:

- Undertaking pavement repairs and resurfacing based on whole-of-life costs and current and predicted condition.

- Managing bridges and other structures to provide ongoing operation of freight efficient vehicles.

**Objective: Transport Efficiency/Travel Reliability**

The provision of a four lane highway over the longer term is a recognised aspiration. A strategic and rational approach has been adopted to provide the best return on investment in terms of measurable transport improvements by:

- Upgrading to four lanes in a staged approach, as traffic volumes increase, that provides a value-for-money outcome.

- Developing a divided two-lane highway with overtaking lanes, within a corridor sufficient for four lanes, where volumes will require conversion to a divided four-lane highway in the medium term, consistent with the approach to upgrading of the Bass Highway.

- Providing additional overtaking and improved overtaking lanes to reduce delays and provide safe overtaking at regular intervals where traffic volumes will remain low for a number of decades.

This plan identifies priority projects for implementation in the following timeframes:

- Immediate to 5 years;
- 5 to 10 years; and
- 10 to 25 years.

Short term priorities are improvements to road user safety, asset performance, securing road corridors for medium term capacity/efficiency projects already scoped and scoping for short-medium term safety and efficiency projects.

**Project outline**

**Objective: Road User Safety**

- Symmons Plains

  A location with an elevated crash rate due to horizontal and vertical geometry that is inconsistent with adjoining road sections. This project will realign the road, provide overtaking lanes and improved access to the Symmons Plains Raceway.

- Mona Vale Road

  A location with an elevated crash rate due to horizontal and vertical geometry that is inconsistent with adjoining road sections and less than contemporary standards. This project will realign the road to provide a consistent standard and speed environment, removing compound horizontal curves with inadequate super-elevation that contribute to loss of control crashes.

- St Peters Pass

  The northern approach to the St Peters Pass rest area has an elevated crash rate associated with tight curves and limited sight distance to the rest area entry. The project will realign the road to improve horizontal geometry and improve sight distance to the rest area entry.

- South of Tunbridge

  A series of sub-standard curves on the southern approach to Tunbridge limiting sight distance and contributing to crashes. Project will provide curve realignment and sight distance improvements.

- White Lagoon

  A short section of road with horizontal and vertical geometry that limits sight distance for overtaking. Cross section widening to incorporate a flexible separation barrier will reduce incidence of crashes associated with risky overtaking behaviour.

- Junction Upgrades

  Nine junctions of key local/regional roads what do not comply with contemporary standards for delineation. Junctions will be upgraded to current Austroads Guidelines.

- Drummond Street Junction, Perth

  A high entry angle t-junction with poor lateral sight lines for vehicles on the entering road. Junction upgrade to improve entry angle and sight lines.

- Campbell Town Main Street

  Campbell Town is a key service centre and rest area for Midland Highway users. Numerous conflict points with high pedestrian movements and significant through traffic. Implementation of traffic calming, safety improvements.

- Pontville to Dysart

  The Bagdad Bypass Planning project has identified a medium to long term option to improve transport efficiency and safety between Pontville and Dysart. This project will implement targeted safety improvements through road widening and junction upgrades on the Mangalore Straight and in Bagdad as an immediate priority, recognising a bypass of Bagdad is a longer term priority.

**Objective: Asset Performance**

- Pavement rehabilitation and resurfacing between Brighton and Perth to extend asset life and improve rideability.

**Objective: Transport Efficiency/Travel Reliability**

- Bridgewater Bridge

  Planning for a new crossing of the Derwent River at Bridgewater has been funded by the Australian Government and is nearing completion. The project will replace the existing bridge which imposes lane capacity, speed, height and weight limitations on road users and has a finite serviceable life.

  Short term priorities are the acquisition of land to secure the road corridor and development of a reference design for future delivery by Design and Construct, ECI or other methodology in the short-medium term.

- Bagdad Bypass

  Planning for a new road corridor between Pontville and Dysart, extending the current Brighton Bypass, has been completed and a PPR submitted to the Australian Government. While this is considered a medium-long term project short term priorities are the acquisition of land to secure the road corridor and development of a reference design for future delivery.

- Perth to Breadalbane

  Planning and construction of a divided four lane highway between Youl Main Road, at the northern end of Perth and the Breadalbane roundabout , to include a new interchange at the existing Breadalbane roundabout.

This section of the Midland Highway has been identified as having a high crash rate and a high volume of commuter traffic. Given that traffic volumes are already well over 10 000, and this section of the section of road has a high crash rate it is considered prudent to plan for and construct a divided four lane highway now.

**Expected capital expenditure estimate**

All estimates, with the exception of Bagdad Bypass, are strategic and based on based on previous project experience. Bagdad Bypass costs are based on P90 estimates from planning. Estimates in $ millions at current cost.

Further planning and scoping works need to be undertaken to determine cost estimates for budgeting purposes.

| | |
|---|---|
| Symmons Plains | 30 |
| Mona Vale Road | 30 |
| St Peters Pass | 12 |
| South of Tunbridge | 7 |
| White Lagoon | 7 |
| Junction Upgrades | 23 |
| Drummond Street, Perth | 2 |
| Campbell Town Main Street | 1 |
| Pontville to Dysart, safety improvements | 50 |
| Pavement rehabilitation | 9 |
| ***Total – safety/asset performance*** | ***171*** |
| | |
| Bridgewater Bridge, land acquisition and design | 20 |
| Bridgewater Bridge, construction | 750 |
| Bagdad Bypass, land acquisition and design (P90) | 15 |
| Bagdad Bypass, construction (P90) | 395 |
| Perth to Breadalbane, planning | 3 |
| Perth to Breadalbane, design and construction | 70 |
| ***Total - efficiency/capacity*** | ***1,253*** |

**Expected return on investment and basis**

The $171 million investment in safety and asset performance will deliver significant crash reduction savings with the identified sites contributing over 80 casualty crashes in the last 5 years.

The benefits derived from the implementation of the Bagdad Bypass in the short term (5-10 years) have been analysed at $498 million including crash savings, travel time savings, vehicle operating costs and economic impact.

The financial analysis of the Bridgewater Bridge is not yet complete but can be expected to deliver multiples of the benefits provided by Bagdad Bypass ( in the order of 2-3 times the benefit).

Perth to Breadalbane will provide transport efficiency and safety benefits. The value of these benefits has not yet been defined but there have been eleven casualty crashes on this section of road in the last five years.

Governments working together

# Midland Highway Partnership Agreement

17 December 2010

Clarence... a brighter place

GLENORCHY CITY

HOBART CITY COUNCIL

LAUNCESTON CITY COUNCIL

NORTHERN MIDLANDS COUNCIL

SOUTHERN MIDLANDS COUNCIL

Local Government Division
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# MIDLAND HIGHWAY
# PARTNERSHIP AGREEMENT

## SHARED VISION

The parties agree that the Midland Highway should be a safe and efficient highway that provides a vital north-south connection for commuters, tourists and freight, linking regions and local communities.

## OBJECTIVES

To achieve the shared vision the parties will strive to achieve the following objectives:

- road safety is improved
- capacity demands are met now and into the future
- infrastructure assets are managed to deliver the appropriate level of service and value
- townships and communities along the highway are supported as service centres
- land-use planning and development supports the function of the highway.

## PLANNED UPGRADES

To achieve the above objectives the parties have agreed to a series of priority projects. While the parties agree that ultimately the highway will be upgraded to four lanes, it is agreed that a staged approach is required.

Priority projects have been identified based on current and forecast traffic volume, road crash analysis, asset performance, and land use and development. Projects will be implemented over the short (immediate to five years), medium (five to 10 years) and long (10 to 25 years) term.

Asset restoration priorities are based on providing a sound road pavement and surface reflecting the role, function and traffic volumes of this section of the National Land Transport Network in Tasmania.

Road safety improvements have been identified based on the crash patterns on the highway and have been integrated within the staged approach to capacity improvements. These include projects at specific sites and mass action treatments along the entire corridor.

The provision of a four lane highway over the longer term is a recognised aspiration. A strategic and rational approach has been adopted by upgrading to a divided four-lane highway in a staged approach as traffic volumes increase. This will provide the best return on investment in terms of measurable transport improvements.

## Immediate to 5 years Priority Projects

### ASSET RESTORATION PROJECTS

- Pavement rehabilitation and resurfacing –various sites Brighton to Perth - $9m

### SPECIFIC SAFETY PROJECTS

- Symmons Plains – road realignment to improve horizontal and vertical curves, extension of overtaking lanes and upgrade access to raceway - $30m
- Mona Vale Road – road realignment to improve horizontal curves consistent with adjacent sections of road -$30m
- Service Centre north of Kempton (Mood Food) access improvements including turning lanes - $5m
- St Peters Pass – curve improvements and realignment - $10m - $12m
- South of Tunbridge – curve improvements and enhanced sight distance - $5m - $7m
- White Lagoon – widening and installation of separation barrier - $6m - $7m
- Drummond Street, Perth – junction upgrade to improve turning movement for freight and other vehicles - $2m
- Campbell Town and Perth – safety and amenity improvements through shared vehicle/pedestrian zone - $1m
- Other specific junction upgrades, including the Eskleigh junction at Perth (M1-M9) - $14m - $23m

### CORRIDOR SAFETY PROJECTS

- Shoulder sealing to provide minimum sealed shoulder width of 1.5 metres - $50m
- Sight distance improvements, delineation and roadside hazard protection - $15m
- Vehicle responsive and weather responsive electronic signs $1m

### CAPACITY/EFFICIENCY PROJECTS

- Bagdad Bypass – Pontville to Dysart – based on current planning for a four lane corridor - $250m - $350m

## 5 to 10 Years Priority Projects

### ASSET RESTORATION PROJECTS

- Ongoing program of pavement rehabilitation and resurfacing - $10m

### SPECIFIC SAFETY PROJECTS

- Kempton to Melton Mowbray – road realignment, widening and improved overtaking opportunities - $10m
- Melton Mowbray north of Lake Secondary Road – connection of northbound overtaking lanes - $10m
- South of Lovely Banks - widening and installation of separation barrier - $15m

- Lovely Banks – extension of north bound overtaking lane and curve improvements - $10m - $12m
- Serpentine Creek - widening and installation of separation barrier - $15m
- Spring Hill – extend northbound overtaking lane and widening and installation of separation barrier - $10m
- Antill Ponds – Currajong Rivulet – improve sight distance and overtaking opportunities - $2m - $3m

**CAPACITY/EFFICIENCY PROJECTS**

- Bridgewater Bridge – construction of a new Bridgewater Bridge and divided four-lane highway to East Derwent Highway including appropriate interchanges - $300m - $600m
- Perth to Breadalbane – new interchange with Evandale Main Road and divided four-lanes through to Perth - $70m

## 10 to 25 Years Priority Projects

**ASSET RESTORATION PROJECTS**

- Ongoing program of pavement rehabilitation and resurfacing

**CORRIDOR SAFETY PROJECTS**

- Ongoing program of widening, overtaking lanes and separation barriers - $200m - $300m

**CAPACITY/EFFICIENCY PROJECTS**

- Esk Main Road junction at Conara – improvement to alignment and grade separated junction with Esk Main Road - $50m
- Perth – western bypass – connecting Midland Highway, Illawarra Main Road and Southern Outlet - $120m - $210m

The context, analysis and further detail on the priority projects are detailed in Attachment A, the report of the Midland Highway working group.

## JOINT APPROACH TO THE AUSTRALIAN GOVERNMENT

The parties agree to jointly approach the Australian Minister for Infrastructure and Transport within eight weeks of signing this agreement to secure funding to implement the plan.

## TERMS OF THE AGREEMENT

### SCOPE

The parties to the agreement are the State Government, and the Brighton, Clarence City, Glenorchy City, Hobart City, Launceston City, Northern Midlands and Southern Midlands Councils.

The partnership agreement refers to the Midland Highway between the Hobart and Launceston CBDs.

The agreement presents clear plans for the future of the highway in a staged manner over the next 25 years.

The partnership agreement will be managed by the State Government (Department of Infrastructure, Energy and Resources).

The partnership agreement has been developed in line with the protocol arrangements that the parties signed on 7 October 2009.

The partnership agreement is overseen by the peak group established under the protocol arrangements.

The agreement will be ongoing until the highway meets the agreed minimum standard, or until the parties otherwise agree to terminate the partnership agreement.

## Principles of the Partnership Agreement

The following principles underpin the partnership agreement:

- the parties recognise the benefits of an inter-governmental and coordinated approach to the issue
- the agreement represents shared leadership on the future of the Midland Highway
- the agreement reflects a shared desire to improve safety along the Midland Highway
- the agreement has been developed according to evidence-based research and is designed to deliver identifiable benefits
- the agreement accommodates the needs of all users where possible, but gives priority to road-user safety, improved freight efficiency and improved travel reliability on the urban approaches
- the agreement reflects a shared desire to maximise the highway's contribution to Tasmania's economic outcomes particularly in its important role as a freight corridor
- the agreement aligns with State and national transport objectives as identified within strategic planning frameworks, including the 2007 Tasmanian AusLink Corridor Strategy and Southern Tasmania National Network Investment Programme
- the outcomes of the agreement will be measured against pre-determined indicators and identifiable benefits.

## Monitoring

The success of the agreement will be measured against the identified objectives.

The State will report on the agreement in its annual report to Parliament on the partnership agreements program. The Councils will report on the agreement in their annual reports.

Reports will be provided on an annual basis to the Premier's Local Government Council which provides oversight to the partnership agreements program.

The contents of the agreement will be reviewed every two years to ensure that it remains current and meets the needs of the parties.

**Signed** for and on behalf of the
**State Government** by
**David Bartlett MP, Premier** .....

**Signed** for and on behalf of the
**Brighton Council** by
**Cr Tony Foster, Mayor** .....

**Signed** for and on behalf of the
**Clarence City Council** by
**Ald Jock Campbell, Mayor** .....

**Signed** for and on behalf of the
**Glenorchy City Council** by
**Ald Adriana Taylor, Mayor** .....

**Signed** for and on behalf of the
**Hobart City Council** by
**Ald Rob Valentine, Lord Mayor** .....

**Signed** for and on behalf of the
**Launceston City Council** by
**Ald Albert van Zetten, Mayor** .....

**Signed** for and on behalf of the
**Northern Midlands Council** by
**Cr Kim Polley, Mayor** .....

**Signed** for and on behalf of the
**Southern Midlands Council** by
**Cr Tony Bisdee, Mayor** .....

# INFRASTRUCTURE AUSTRALIA: APPLICATION FOR ELIGIBILITY FOR ASSESSMENT

| | |
|---|---|
| **PROJECT NAME:** | **Brooker Highway – Urban National Network** |
| **PROPONENT ORGANISATION:** | Department of Infrastructure, Energy and Resources |
| **CONTACT PERSON**: | Peter Todd<br>General Manager, Roads and Traffic Division<br>GPO Box 936, Hobart, Tas 7001 |
| **CONTACT EMAIL:** | Peter.Todd@dier.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 6361 |

**PROJECT DETAILS:**

**Problem being addressed**

The Brooker Highway is part of the National Land Transport Network (National Network) in Tasmania, an integrated network of land transport links within national and inter-regional land transport corridors that are of critical importance to national and regional growth.

The Highway is a critical urban arterial road, classified as a Category 1 Trunk road in the Tasmanian State Road Hierarchy, connecting Hobart's residential, commercial and industrial zones and linking with the Midland Highway to provide access to northern centres and Tasmania's main export ports.

The links in the National Network support the movement of goods and people between the three major urban centres of Hobart, Launceston and Devonport-Burnie, industrial areas and the ports of Hobart, Burnie, Launceston (Bell Bay) and Devonport.

In 2011 the Tasmanian State Government joined with Local Government Authorities along the Brooker Highway to develop the Brooker Highway Partnership Agreement (copy attached); a plan for future investment in and operation of the highway.

The vision, actions and priorities contained in the plan are focussed on four key objectives:

- Capacity and Efficiency;
- Road Safety;
- Local Connectivity; and
- Asset Maintenance

**Objective: Capacity and Efficiency**

Priorities are based on analysis of current and predicted future traffic volumes, the effect of these volumes on intersection and road segment levels of service, and ability to improve travel time reliability through non-infrastructure solutions.

**Objective: Road Safety**

Priorities are based on identification of the crash patterns on the Highway. Specific projects are integrated with other upgrades such as intersection or accessibility upgrades. Other safety initiatives relate to the Highway as a whole.

**Objective: Local Connectivity**

Priorities are based on addressing known connectivity problems between communities and activity centres, and an assessment of both pedestrian and vehicular connections along the Highway.

**Objective: Asset Maintenance**

Priorities are based on providing appropriate road pavement, signage and improved appearance of the Highway as the northern gateway into Hobart.

This plan identifies priority projects for implementation in the following timeframes:

- Immediate to 3 years;
- 3 to 10 years; and
- 10 to 25 years.

Immediate and short term priorities are improvements to road safety, asset maintenance, project identification and planning for short-medium term safety and efficiency projects.

**Project outline**

**Objective: Capacity and Efficiency**

- Berriedale Road to Howard Road

  The section of highway between Berriedale Road interchange and Howard Road at Goodwood provides the transition from a freeway style of road (north of Berriedale) to a signalised urban highway (south of Goodwood). It contains a number of uncontrolled local road intersections, direct property access and on/off ramps and key intersections. A strategic review is currently underway to further define a plan for this section of road and identify projects for scoping.

  The immediate priority is scoping of the projects identified during this review.

- Goodwood/Elwick/Howard Roads

  Goodwood, Elwick and Howard Roads are urban arterial and collector roads providing access into residential, commercial and industrial areas of Glenorchy, which have junctions with the Brooker Highway in very close proximity. The proximity and layout of these junctions impose capacity and efficiency constraints on the Brooker Highway. Significant junction upgrades will be needed in the short term, with scoping and design development immediate priorities.

- Risdon Road Junction

  Risdon Road is an urban arterial road providing access into residential and commercial zones in New Town and critical industrial sites at Lutana and Self's Point. There are currently significant capacity and efficiency constraints at this junction. The project will grade separate the junction to provide improved efficiency, particularly for through traffic on the Brooker Highway.

  The short term priority is project scoping and corridor protection.

- Risdon Road to Domain Interchange

  There is currently insufficient capacity at the Domain Interchange, which connects the Brooker Highway to the Domain Highway and on to the eastern suburbs and Hobart airport. Thee capacity issues also reflect back through the mid-block section between the Domain Highway and Risdon Road. This project will upgrade the Domain interchange and provide additional mid-block capacity.

  The short term priority is project scoping and corridor protection.

**Objective: Road Safety**

- Foreshore Road

  The Montrose Bay High School is situated on the Derwent River foreshore adjacent to, and with access from, the Brooker Highway. Continued growth in student numbers and through traffic volumes on the Highway is increasing potential for conflict at the school access on Foreshore Road. This project will upgrade the Foreshore Road Junction

**Objective: Local Connectivity**

Local connectivity issues will be addressed during the Berriedale to Goodwood Review and the scoping for Capacity and Efficiency Projects.

**Objective: Asset Maintenance**

- Pavement rehabilitation and other asset renewal projects between Domain Highway and Granton in the short term.

Expected capital expenditure estimate

All estimates are strategic and based on based on previous project experience. Estimates in $ millions at current cost.

Further planning and scoping works need to be undertaken to determine cost estimates for budgeting purposes.

| | |
|---|---|
| Berriedale Road to Howard Road, scoping | 10 |
| Goodwood/Elwick/Howard, scoping | 3 |
| Goodwood/Elwick/Howard, design and construction | 50 |
| Risdon Road Junction, scoping | 4 |
| Risdon Road Junction, design and construction | 60 |
| Risdon Road to Domain Interchange, scoping | 6 |
| Risdon Road to Domain Interchange, design and construction | 80 |
| ***Total – Capacity/Efficiency*** | ***213*** |
| | |
| Foreshore Road, design and construction | 5 |
| Pavement Rehabilitation/renewal | 20 |
| ***Total – Safety/Asset Maintenance*** | ***25*** |

**Expected return on investment and basis**

The suite of projects identified to date provides benefits predominantly around transport efficiency, travel time savings and reliability and vehicle operating costs. The value of the benefit will be quantified through the detailed scoping of the projects and associated cost benefit analysis.

The immediate requirement is for funding to complete scoping of the identified projects.

Governments working together

# Brooker Highway Transport Plan

# Partnership Agreement

19 APRIL 2011

Local Government Division
Department of Premier and Cabinet

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# BROOKER HIGHWAY TRANSPORT PLAN
# PARTNERSHIP AGREEMENT

## PURPOSE OF THE PARTNERSHIP AGREEEMENT

The purpose of this partnership agreement is to commit the State Government, the Brighton Council, and the Glenorchy and Hobart City Councils to the implementation of the Brooker Highway Transport Plan (Attachment A).

## PURPOSE OF THE BROOKER HIGHWAY TRANSPORT PLAN

The Brooker Highway Transport Plan has been developed to provide:

- joint recognition of the importance of the Highway as part of both the intrastate and Greater Hobart urban transport networks
- a shared vision for the future of the Brooker Highway
- an agreed framework for future planning and investment, including priorities over the short, medium and long term
- a basis to attract and direct future infrastructure funding.

## SHARED VISION FOR THE BROOKER HIGHWAY

The Brooker Highway will continue to be a safe and efficient urban highway, able to cater for a large and growing transport task (including freight and passengers) and facilitate local transport access.

## OBJECTIVES OF THE BROOKER HIGHWAY TRANSPORT PLAN

The key objectives for the Brooker Highway Transport Plan are to:

- maintain capacity and travel time reliability for efficient movement of freight and passengers
- improve road safety and reduce crash rates through strategies and infrastructure solutions
- improve local connectivity between residential areas and activity centres for both vehicles and pedestrians, including connections to key local roads
- create land-use planning and development patterns that support the function of the Brooker Highway
- manage infrastructure assets to deliver an appropriate level of service and visual amenity
- monitor future trends in the transport system to adapt planning and meet changes in demand
- improve residential amenity for people living along the Brooker Highway.

# A STRATEGIC FRAMEWORK FOR THE FUTURE PLANNING OF THE BROOKER HIGHWAY

The Brooker Highway is a critical transport link in metropolitan Hobart, and a key part of Tasmania's intrastate freight supply chain. It is a part of the National Network and a Category 1 trunk road under the Tasmanian State Road Hierarchy.

The Highway carries some of the highest traffic volumes on Tasmania's road network, reflecting its role as a key link in Tasmania's north-south transport corridor (i.e. Hobart to Launceston) and in connecting major activity centres – central Hobart, Glenorchy, Brighton – major industrial centres – Derwent Park/Moonah, Brighton Transport Hub and Brighton Industrial Estate – and key local roads – e.g. Derwent Park, Risdon, Goodwood and Elwick Roads.

The Brooker Highway Transport Plan outlines objectives to guide future investment in the Highway; key issues affecting the Highway – efficiency and capacity, safety, accessibility, land use planning and asset restoration; and priorities for action over the short, medium and long term.

To achieve the plan's objectives, a series of priority projects and key initiatives have been identified. Using current information, the plan identifies priority projects over the short (immediate to three years), medium (three to 10 years) and long (10 to 25 years) term.

**Capacity and efficiency** priorities are based on analysis of current and predicted future traffic volumes, the effect of these volumes on intersection and road segment levels of service, and ability to improve travel time reliability through non-infrastructure solutions.

**Road-safety** priorities are based on identification of the crash patterns on the Highway. Specific projects are integrated with other upgrades such as intersection or accessibility upgrades. Other safety initiatives relate to the Highway as a whole.

**Local connectivity** priorities are based on addressing known connectivity problems between communities and activity centres, and an assessment of both pedestrian and vehicular connections along the Highway.

**Asset maintenance** priorities are based on providing appropriate road pavement, signage and improved general appearance of the Highway.

The priority for **land-use and development** patterns ensures that future land-use changes and new developments support the function of the Highway and minimise their impact on the capacity and efficiency of the Highway.

Monitoring **future trends** is important to identify key trends and impacts which will affect the Brooker Highway over the longer term. The impact of these trends is currently not clear and ongoing review of these longer-term trends through data collection and model development forms a key project, and will provide the basis for evidence-based responses to be developed within the plan timeframe.

# NEXT THREE YEAR PRIORITY PROJECTS

## 1. CAPACITY / EFFICIENCY PROJECTS

### Planning

- Finalise strategic planning and design options for Brooker Highway intersection upgrades between Berriedale Road and Howard Road.
- Finalise design options for Domain Highway intersections and increased lane capacity between Domain Highway and Risdon Road.
- Intersection safety, accessibility and capacity review.
- Examine options for variable speed limits.

### Infrastructure upgrades

- Howard Road / Elwick Road / Goodwood Road intersections – capacity and efficiency upgrades (note Foreshore Road included as a safety project).

### Non-infrastructure measures

- Enhancements to traffic signal co-ordination following intersection upgrade at Howard Road.
- Travel demand management measures – through Tasmanian Urban Passenger Transport Framework and Southern Integrated Transport Plan.
- Implementation of Performance Based Systems (PBS) and providing quad axle vehicle access.

## 2. SAFETY PROJECTS

- Removal of the Montrose Bay High School drop off / pick up from the Highway.
- Foreshore Road / Duncan Street intersection safety improvements.
- Ongoing review of safety performance of the Highway, including speed limits.

## 3. ACCESSIBILITY PROJECTS

- Provide pedestrian crossings in conjunction with intersection upgrades that comply with the requirements of the *Disability Discrimination Act 1992*.
- Inter-suburb access review for pedestrian and vehicle movements (including buses).
- Linkages to local road networks, including requirements for improved directional signage and information.
- Linkages to new and proposed developments along Glenorchy foreshore, including the Glenorchy Art and Sculpture Park, Museum of New and Old Art and Wilkinsons Point.

## 4. LAND-USE PLANNING PROJECTS

- Maintain residential amenity through planning controls.
- Finalise the Department of Infrastructure, Energy and Resource's (DIER )State Road Noise Strategy.

## 5. ASSET RESTORATION PROJECTS

- Develop an overall plan to progressively improve the appearance of the Highway.
- Pavement rehabilitation and resurfacing – [ongoing program].

## 6. FUTURE TRENDS PROJECTS

- Regular program of Brooker Highway traffic counts, including local road counts.
- Better understand light industrial vehicle movements.
- Examine land-use change on a regular basis, including industrial, commercial and residential development.
- Analysis of travel demand information.

# THREE to 10 YEAR PRIORITY PROJECTS

## 1. CAPACITY / EFFICIENCY PROJECTS

- Domain Highway intersection – upgrade and increase capacity between Risdon Road and Domain Highway interchange.
- Risdon Road to Howard Road – examine feasibility and cost of increasing capacity and removing or reducing direct accesses.
- Lyell / Midland Highway intersection – upgrades associated with new Derwent River crossing.
- Non-infrastructure measures – implementation of Tasmanian Urban Passenger Framework and Southern Integrated Transport Plan.
- Variable speed limits – implementation for sections south of Berriedale Road.

## 2. SAFETY PROJECTS

- Intersections – implementation of intersection safety upgrade priorities based on review.
- Safety statistics - review and act on issues.

## 3. ACCESSIBILITY PROJECTS

- Inter-suburb access review – implementation of measures to improve inter-suburb access.
- Linkages to local road networks – improve directional signage and information to/from major ramps and key existing or new destinations.

## 4. LAND USE PLANNING PROJECTS

- Continue examination of land-use change on a regular basis, including industrial, commercial and residential development.

## 5. ASSET RESTORATION PROJECTS

- Visual Amenity – continue to implement based on plan.
- Pavement rehabilitation and resurfacing.

## 6. FUTURE TRENDS PROJECTS

- Continue Brooker Highway traffic counts, incorporating local road counts.
- Industrial vehicle movements – continue monitoring.
- Continue examination of land use change on a regular basis, including industrial, commercial and residential development.
- Analysis of travel demand information - continue monitoring.

## 10 to 25 YEAR PRIORITY PROJECTS

- Continue ongoing programs in all category areas.
- Revision of the Brooker Highway Transport Plan, in conjunction with local government.

## SUPPORTING INFORMATION

The Brooker Highway Transport Plan aligns with

- the Midland Highway Partnership Agreement
- the Southern Tasmania Regional Land Use Framework
- the Southern Integrated Transport Plan
- the Southern Tasmanian National Network Investment Program.

The Plan is informed by the objectives and analysis of the Tasmanian Urban Passenger Transport Framework, the Tasmanian Government's submission to Infrastructure Australia and past traffic modelling in support of specific initiatives on the Highway (determination of options at Elwick-Goodwood intersection and whole of corridor modelling of bus priority measures).

## TERMS OF THE AGREEMENT

### SCOPE

The parties to the agreement are the State Government, and the Brighton, Glenorchy City and Hobart City Councils.

The partnership agreement refers to the Brooker Highway and Brooker Avenue between the junction of the Midland and Lyell Highways, south to Macquarie Street.

The agreement presents clear plans for the future of the Brooker Highway in a staged manner over the next 25 years.

The partnership agreement will be managed by the State Government (DIER).

The agreement will be ongoing until the plan is fully implemented, or until the parties otherwise agree to terminate the partnership agreement.

### PRINCIPLES OF THE PARTNERSHIP AGREEMENT

The following principles underpin the partnership agreement:

- the parties recognise the benefits of an inter-governmental and coordinated approach to the issue
- the agreement represents shared leadership on the future of the Brooker Highway
- the agreement reflects a shared desire to improve safety, efficiency, connectivity and land use planning along the Brooker Highway
- the agreement has been developed according to evidence-based research and is designed to deliver identifiable benefits
- the agreement accommodates the needs of all users where possible, but gives priority to capacity and efficiency, road safety, asset maintenance, improved connectivity and improved land use planning.

### MONITORING

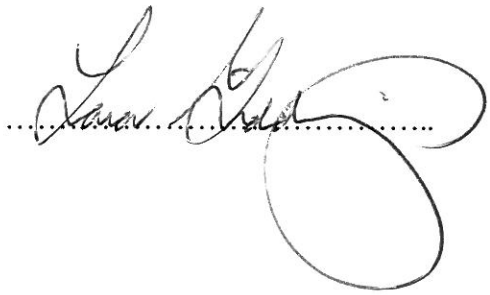
The State will report on the agreement in its annual report to Parliament on the partnership agreements program. DIER will provide updates to the Local Government Division (Department of Premier and Cabinet) twice a year to support progress of the agreement.

The Councils will report on the agreement in their annual reports.

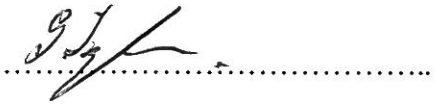
The DIER will evaluate the plan every two years to ensure that it remains current and meets the needs of the parties.

The success of the plan will be measured against its identified objectives.

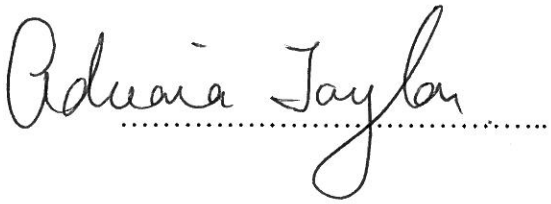
**Signed** for an on behalf of the
**State Government** by
**Lara Giddings MP, Premier**



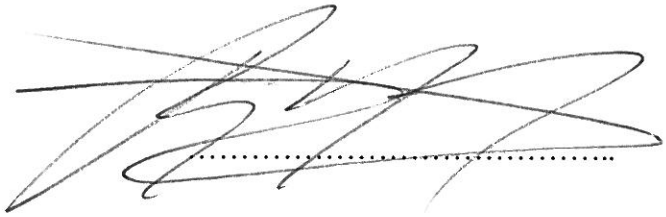
**Signed** for and on behalf of the
**Brighton Council** by
**Cr Geoff Taylor, Deputy Mayor**



**Signed** for and on behalf of the
**Glenorchy City Council** by
**Ald Adriana Taylor, Mayor**



**Signed** for and on behalf of the
**Hobart City Council** by
**Ald Rob Valentine, Lord Mayor**



# INFRASTRUCTURE AUSTRALIA: APPLICATION FOR ELIGIBILITY FOR ASSESSMENT

| | |
|---|---|
| **PROJECT NAME:** | **Tasmanian Rail Revitalisation Program** |
| **PROPONENT ORGANISATION:** | Tasrail, via the Department of Infrastructure, Energy and Resources |
| **CONTACT PERSON:** | Damien White<br>CEO Tasrail<br>PO Box 140, Newstead, Tas 7250 |

**PROJECT DETAILS:**

**Problem being addressed**

The Australian and Tasmanian Governments share key strategic objectives of facilitating efficient freight transport for industry and consumers, including ensuring effective intermodal competition, modal interoperability, competitive neutrality in the freight network, effective and efficient interconnections between major transport corridors (including connecting the national network via key ports), and efficiently and sustainably accommodating the projected growth in the freight task.

Within this framework, the development of the National Freight Network, and particularly the development of rail networks, is key. The Tasmanian freight task is expected to grow by at least 2.2% annually up to and beyond 2030.

In Tasmania, the primary 'problem' in delivering the above strategic objectives is the relative poor reliability and competitiveness that rail freight market participants experience arising from the relatively poor condition of large parts of the rail network. As a result, rail's competitive position has been weakened over time, along with the prospects for effective intermodal competition, particularly with the advent of high-productivity road freight vehicles.

Specifically, a long period of inadequate investment in rail infrastructure in Tasmania has led to the following issues:

- A high cost to keep the rail infrastructure operational because much of the asset has reached the end of its useful life;
- Reactive rather than proactive rail infrastructure investment;
- Relatively frequent derailments that incur high unplanned costs and cause disruption to rail operations;
- Extensive speed restrictions on the network inhibiting the efficiency of rail operations; and
- The poor reliability and consistency of the rail operations, due to the poor condition of the rail infrastructure, has led to a reduction in freight patronage.

Conversely, recent investments under the Nation Building Program have enabled urgent safety and reactive maintenance works to be undertaken along with the commencement of the renewal of the

network. In recent times, there has been a marked improvement in performance and reliability, and some early signs of growth in rail's market share arising from this recent investment in the network. However, further funding commitments are required to build upon these improvements, and to ensure that the Tasmanian rail network is positioned in the long term to deliver the required commercial outcomes for Tasmanian industry and freight users.

The Tasmanian Rail Revitalisation Program is designed to overcome this future investment shortfall and to build on the work undertaken to date in order to deliver a competitive and sustainable rail freight network for the long-term.

The Program will also help deliver other strategic transport objectives for the National Freight Network by helping to maximise the productivity and capacity of the three key northern ports, improve the efficiency of their connections to major road and rail freight corridors to facilitate domestic trade and international exports and, importantly, achieve better utilisation of existing infrastructure. The Program also complements the significant above-rail investment being funded by the Tasmanian Government in new locomotives, freight wagons and train control systems.

Notwithstanding recent incremental improvements in rail volumes, unless the average condition and capability of the network can continue to be substantially improved, the cost of maintenance of the network will continue to increase, and the ability for rail to provide effective intermodal competition will be severely limited. Under such a scenario, the loss of more freight to road is conceivable which would lead to the following outcomes:

- Loss of competition with reduced productivity and capacity in the freight network
- Decline in efficiencies to and from the ports
- Increased constraints to growth, particularly in the resources and agricultural sectors
- Increased road costs arising from increased road freight traffic
- Increase in overall carbon emissions as a result reducing rail volumes
- Foregone returns on Nation Building investment in Tasmania's rail network to date
- Foregone returns on Tasmanian Government capital investment in above-rail equipment (i.e. new locomotives and wagons)

**Project outline**

The project objective is to make the rail operation in Tasmania sustainable by:

- Raising the average condition of the network so that the recurrent costs of managing the asset are substantially less than current costs.
- Improving the efficiency and capability of the rail network.
- Increasing revenues through higher freight patronage arising from improved reliability, improved competitive position, and improved consistency of service.

After arresting years of underinvestment, Tasrail is now able to take a much more proactive approach to the upgrading of the rail network. A continuation of the current capital injection into the rail system will mean that the cycle of chronic insufficient rail investment is broken and that the

rail network will be in a position to increase the efficiency of the current network while attracting new users.

The Tasmanian Rail Revitalisation Program is structured to address the most critical parts of the rail network that are in need of upgrading, and will deliver a network condition where the recurrent asset management demand (i.e. maintenance and asset depreciation) will match predicted rail operations revenue. Such an outcome will deliver competitive neutrality between road and rail transport where rail services will be able to be undertaken on a commercial basis.

**Expected capital expenditure estimate**

The overall project estimate is of the order of approximately $240 million.

The Tasmanian Rail Revitalisation Program will include but is not confined to the following:

- Relay much of the entire network with concrete sleepers (Brighton to Bell Bay and Burnie) - $85 million
- Relay approximately 290 track km of life-expired rail that needs to be replaced in the next 3-5 years - $25 million for rail and $30 million for re-railing activities
- Strengthening of bridges, removal of lead paint and culvert/bridge replacements - $30 million
- Formation and Drainage Rectification – $20 million
- Various specific upgrade and remedial works to be completed on the Melba Line - $15 million – critical for the State's international exports
- Upgrade and remedial works to be completed on the Fingal Line – $20 million
- Upgrade work on the Bell Bay Line to ensure the line remains operational - $15 million - critical for the State's international exports

**Expected return on investment and basis**

**Economic benefits**

The direct economic benefit of the project will be a competitive and financially sustainable Tasmanian rail network arising from the reduced cost of managing the infrastructure asset, and increased revenues from higher freight patronage. A maintenance-efficient rail network can be expected to cost less than half of what is the current cost to maintain the network (~$24,000/track km).

The identified benefits relate to maintaining current rail market share relative to road. Any improvement in market share will translate to increased benefits in the areas identified.

**Environmental benefits**

The Tasmanian Government has set a legislated target for carbon emissions reduced to 60% of 1990 levels by 2050. By investing capital in the Tasmanian Rail Revitalisation Program, the potential to reduce carbon emissions by maximising the rail freight use is a quantifiable goal that can assist in achieving the stated goal.

The reduction in pollution of waterways in Tasmania is also a quantifiable benefit. The upgrade of the rail network will decrease the risk of derailments and associated contaminants entering the environment. The transfer of a significant portion of road freight to rail freight will reduce the risk of potential accidents on the highway network and will also reduce the volume of hydrocarbons entering waterways through highway drainage.

**Social benefits**

The amenity of Tasmania's rural community will be improved as freight traffic on the roads will not increase, and hopefully reduce with increased rail freight patronage. The pressure to by-pass towns will be reduced which will allow the businesses providing services to road users to benefit from increased tourist traffic.

A transfer of a significant proportion of road freight to rail freight will have a direct positive effect on the numbers of accidents on the road network and will produce a better experience for those who need to use road transport.

The table below provides a summary of the anticipated benefits and costs, based on reasonable assumptions investment case with a 7% discount.

| Future Projections | NPV Costs ($M) | NPV Benefits ($M) | NPV ($M) | BCR |
|---|---|---|---|---|
| 2035 | 313 | 441 | 129 | 1.41 |
| 2055 | 335 | 579 | 244 | 1.73 |

Higher economic benefits not included in the analysis to date include:

- Improved productivity and capacity arising from transparent competition in the freight network
- Increase in efficiencies to and from the ports, particularly in the resources and agricultural growth sectors
- Reduced road maintenance and capital improvement costs
- Increased tourism as the self drive tourism experience improves through less freight on roads
- Competitive neutrality between road and rail transport

# INFRASTRUCTURE AUSTRALIA: APPLICATION FOR ELIGIBILITY FOR ASSESSMENT

| | |
|---|---|
| **PROJECT NAME:** | **Passenger Transport in Hobart's Northern Suburbs** |
| **PROPONENT ORGANISATION:** | Department of Infrastructure, Energy and Resources |
| **CONTACT PERSON:** | James Verrier<br>A/Director, Passenger Transport Policy<br>GPO Box 936, Hobart, Tas, 7001 |
| **CONTACT EMAIL:** | james.verrier@dier.tas.gov.au |
| **CONTACT PHONE:** | (03) 6233 3017 |

**PROJECT DETAILS:**

The Tasmanian Government is currently investigating passenger transport options in Hobart's Northern Suburbs, including the potential public transport role of the Hobart Northern Suburbs Rail Corridor (Rail Corridor).

Greater Hobart is Tasmania's largest urban area, and is home to approximately 40 per cent of the State's population. Greater Hobart is classified as a 'smaller city' using Infrastructure Australia's classification structure, being the 11th largest population centre in Australia.

The Northern Suburbs extend along the western shore of the Derwent River from the City of Hobart and as far as the township of Brighton, contain approximately 30 per cent of the city's overall population. The area is a mixture of residential and commercial development, with light and heavy industrial activities concentrated in the areas of Derwent Park, Lutana and Austins Ferry.

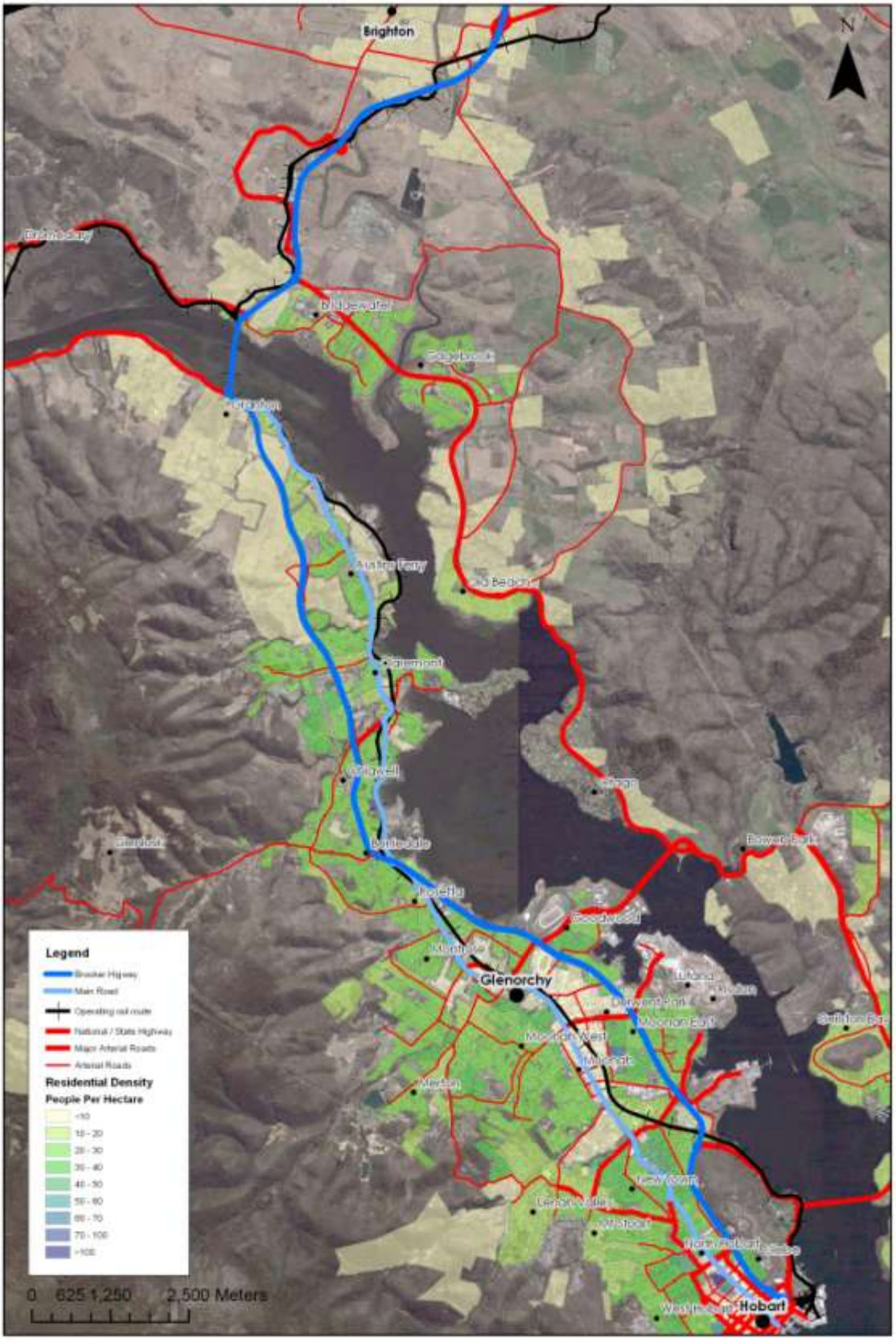
The area is currently traversed by three separate transport corridors:

- The Brooker Highway, which forms part of the strategic freight route linking Hobart with the Northern Tasmanian ports and is the key arterial for car-based journeys into the Hobart CBD and beyond from the Northern Suburbs.

- Main Road (incorporating New Town Road and Elizabeth Street), which is managed primarily as an intra-suburban corridor but also supports a high frequency bus service between the Glenorchy and Hobart CBDs.

- The Northern Suburbs Rail Corridor, which currently carries limited rail freight services, but also includes the inter-city cycleway between Claremont and Hobart.

**Hobart Northern Suburbs**



The Northern Suburbs of Hobart has been identified as a priority area for action within Hobart because of the importance of the Brooker Highway as a strategic freight corridor and also the potential opportunities offered by the Northern Suburbs Rail Corridor, directly linking the Northern Suburbs to the Sullivans Cove Waterfront precinct.

The challenges faced by the Tasmanian Government are characterised in Hobart's Northern Suburbs, which exhibit many of the characteristics of mid to late 20th century urban settlement:

- Highest population growth in fringe suburbs, with the Municipality of Brighton having experienced the highest population growth in southern Tasmania over the period 2001-2010, at 2.74 per cent a year and the Municipalities of Hobart and Glenorchy experiencing a growth rate of 0.6 and 0.2 per cent a year respectively over the same period.

- Social disadvantage, with the Municipality of Brighton ranking the lowest in Tasmanian in terms of the Social Economic Indices for Areas (SEIFA). High levels of transport disadvantage have also been demonstrated to occur through the Northern Suburbs with significant proportions of lone person and one parent families with children not owning a motor vehicle.

- Dispersed settlement pattern with low density housing, with average density of new residential areas now between 7 to 10 dwellings per hectare, well below the agreed national standard for effective delivery of public transport services of 15-25 dwellings.

- Separation of land uses, exemplified by fringe areas where motorised transport is required to meet basic service requirements such as food stores, medical services and school/childcare.

- High rates of car ownership and journeys by car.

These characteristics have led to:

- A high penetration, low frequency public transport system designed to service dispersed urban settlements.

- Low public transport use, with the Tasmanian Household Travel Survey indicating that only 5 per cent of all trips are taken by public transport in Hobart's outer northern suburbs.

- Increasing congestion being experienced on the Brooker Highway.

The Brooker Highway forms part of Tasmania's strategic freight network, and is part of the National Highway. The Brooker Highway already experiences Levels of service 'D' at peak times, with traffic flow expected to deteriorate further. It is the most congested link in the Greater Hobart road network.

From a national perspective, Hobart remains an easy city to navigate by car. However, in the absence of a change in the existing transport paradigm, Hobart's Northern Suburbs are predicted to experience:

- A doubling of population in the outer urban fringe Municipality of Brighton and decline of population in the City of Glenorchy by 2032.

- Freight volumes on the Brooker Highway increasing from 2.7 million tonnes to 4.5 million tonnes by 2027.

- Traffic volumes on the Brooker Highway increasing from approximately 50,000 vehicles a day to 70 000 vehicles per day by 2031.

- Greenhouse gas emissions rising by a further 16 per cent from 2007 levels by 2030.

- The cessation of all freight rail traffic on the rail corridor between Hobart and Bridgewater.

**Strategic fit/rationale:**

Transport accessibility is recognised as one of the key indicators of 'a reasonable lifestyle and standard of living' in the *Tasmanian Together* framework, which sets out the highest level goals and benchmarks identified by the Tasmanian Community.

The Tasmanian Urban Passenger Transport Framework (Framework) summarises the Tasmanian Government's vision for the passenger transport system:

> *"A safe and responsive passenger transport system that supports improved accessibility, liveability and health outcomes for our communities in the context of the challenges of climate change."*

The Tasmanian Government is concerned not only with the efficient operation of a public transport system, but managing a transport system that focuses on the movement of people, rather than vehicles.

The Framework is focused on improving outcomes in five priority areas:

- Reducing emissions from the passenger transport sector, giving priority to infrastructure and travel modes with low carbon emissions;

- Liveable and accessible communities, developing compact, connected communities that integrate with public transport corridors;

- Travel reliability, by providing predictable journey times;

- Healthy, active communities through the encouragement of active transport modes for shorter journeys; and

- Integrated transport and land use planning, to ensure land use and passenger transport decisions are aligned.

The objectives described in the *Framework* link to goals identified in a number of different strategies at a State and Local Government level.

The Tasmanian Government has set a legislated target for carbon emissions reduced to 60 per cent of 1990 levels by 2050. It has also set target for a 10 percentage point increase in the rates of participation in physical activity by different age groups by 2021.

The Southern Tasmanian Councils Association's draft Southern Regional Land Use Strategy has set targets of a minimum of 25 dwellings per hectare for areas zoned 'Inner Residential' around transit corridors and for 6,000 additional dwellings created through infill and redevelopment opportunities prior to any expansion of the proposed urban boundary.

The Framework priorities align with Infrastructure Australia's Strategic Priorities to: Develop our Cities/Towns; Reduce Greenhouse Gas Emissions; and improve social equity/quality of life. They are also aligned with the policies and objectives described in the National Urban Policy.

While much of the focus in recent years has been on public transport improvements in Australia's major cities, the Tasmanian Government believes that commensurately scaled improvements to public transport in smaller cities can help Australia reach its broader goals for the national transport system. Hobart's Northern Suburbs provide a potential national model for what can be achieved in medium and smaller cities with more efficient use of existing resources.

As such, the investigation is being undertaken in the context of the Infrastructure Australia theme for action of 'Transforming our Cities'. In its investigations to date, the Tasmanian Government has been particularly concerned to better understand the potential long-term role of the Rail Corridor, as part of a strategy to increase public transport capacity and make better use of existing transport infrastructure.

**Project Outline:**

The Tasmanian Government is aware of the importance of identifying and assessing the widest possible range of options to addressing the problems it has identified.

While some infrastructure options have been identified and assessed in detail, such as options to re-use the rail corridor, limited work has been undertaken on alternatives that make better use of existing road-based public transport infrastructure, and the potential impact of proposed changes in regulation and land use policy at a Local and State Government level.

The Tasmanian Government intends to investigate passenger transport models for the Northern Suburbs as part of an integrated land use and transport strategy for the area. Some elements of this strategy are to be found in related work already completed:

- Southern Integrated Transport Plan 2010
- Tasmanian Urban Passenger Transport Framework 2010
- Brooker Highway Transport Plan 2011
- Tasmanian Walking and Cycling Strategy for Active Transport 2010
- Draft Southern Tasmania Regional Land Use Strategy 2010

These elements include:

- The establishment of an urban growth boundary.

- Target growth to maximise use of existing infrastructure, services and facilities, including public transport and schools.

- Higher proportion of growth through infill and redevelopment of existing urban areas to meet the dwelling targets.

- Develop and implement a Greater Hobart parking strategy.

- Better utilisation of available road space, such as targeted intersection upgrades and use of Intelligent Transport Systems.

- Develop transit corridor plans for high frequency public transport routes focusing on public transport priority and land use change.

- Manage the Brooker Highway to maintain capacity and travel time reliability for the efficient and safe movement of freight and passengers.

The draft Southern Tasmania Regional Land Use Strategy confirms the importance of the land between Moonah and Claremont as part of the urban infill strategy. Notably, the distances between the Rail Corridor and Main Road are relatively small through this area and an infill strategy targeting this area is likely to enable residents to utilise both the Main Road and Rail Corridor.

The development of the Brighton Transport Hub is expected to see a shift in industrial development from the Northern Suburbs towards Brighton. This may represent an opportunity to redevelop industrial land elsewhere within Glenorchy to higher order land uses, if there is an adequate supply of industrial land within Southern Tasmania.

***Potential role for the rail corridor***

Although at an early stage of analysis, the Tasmanian Government considers that the Northern Suburbs Rail Corridor is likely to have a strong influence on its long-term people movement strategy for the Northern Suburbs.

The Rail Corridor historically formed one the primary components of Hobart's public transport system. The corridor links the main commercial centres of Hobart and Glenorchy, and sub-regional centres such as Moonah and New Town.

The Rail Corridor offers a number of clear advantages as a passenger transport link over both the Brooker Highway and Main Road. In particular, it offers a congestion free thoroughfare into the Hobart waterfront that can be reserved for public transport, walking and cycling.

A Business Case has recently been undertaken assessing the potential for Light Rail to operate on the Rail Corridor (www.transport.tas.gov.au/miscellaneous/northern_suburbs_to_hobart_cbd_light_rail_business_case).

The Business Case has confirmed that, in the short to medium term future, a rail service is likely to provide a travel time competitive with private cars making the same journey, particularly during the morning peak period.

While it is expected that the Main Road will retain a public transport role over the long term, its ability to deliver a notable travel time advantage over private vehicles travelling on the Brooker Highway is doubtful. It is expected that improvements to existing public transport services on the Main Road will generate some degree of modal shift. However, its capacity to influence a widespread transformation in commuter travel habits from the Northern Suburbs remains uncertain.

The Rail Corridor can provide a reliable and predictable journey time into the future and, from this platform, support a broader change in travel behaviour.

The Light Rail Business Case suggests that a benefit cost ratio of greater than 1 could be achievable for rail services, if there was a very strong community demand to the establishment of the service. However, work completed to date also identifies factors that suggest the establishment of a passenger rail service may not be sufficient on its own to strongly influence the travel habits of Hobart motorists.

There are a number of reasons for this conclusion, which include:

- The small population within walking distance of the existing rail line, necessitating multi-modal journeys for most residents to take advantage of a rail service on the existing alignment;
- Short average commuting distances;
- Areas of road traffic congestion limited both spatially and to morning and afternoon peak periods;
- Relatively low average speed expected for a rail service compared to non-peak road speeds; and
- Low car parking costs.

The Tasmanian Government recognises the need to assess its transport strategies in the context of these characteristics, which will clearly influence the range of options that are likely to be viable.

Investigation into transport solutions for the Northern Suburbs is at a preliminary stage, and no specific proposal is to be put forward to Infrastructure Australia at this time.

Building on its initial analysis, the Tasmanian Government will continue both its problem analysis, and option identification and assessment, to ensure future submissions put forward options that are confirmed to be commensurate with the nature and scale of the problems identified.

**Expected Capital Expenditure**

The capital cost of re-introducing a rail service has been estimated at $80 million using diesel powered vehicles and $92 million for an electrified rail service. The capital cost of alternative options has not yet been calculated.

**Expected benefits**

The expected benefits for rail services have been considered in terms of:

- Pollution costs and their reduction;
- Travel time savings;
- Savings in fuel and other operating costs for cars;
- Alleviation of social exclusion;
- Savings from lower accident cost risks; and
- Avoidance of parking costs.

Additional benefits of a rail service considered, but not monetised, included:

- Urban redevelopment around the rail corridor; and
- Tourism.

Benefits of alternative options have not yet been defined.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