Tasmanian Government
2012 Submission to Nation Building 2 Program

Hobart Central Bus Interchange Design

(Part of Hobart Passenger Transport Innovation Program)

September 2012

Department *of* Infrastructure, Energy *and* Resources

Tasmania
Explore the possibilities

Priority assigned by jurisdiction for NB2 funding consideration	**Priority Two under Innovation**
Details of full scope of project, including objectives, service requirements, project status and project phase(s) seeking funding. Note: It is expected that this will be largely addressed through the main IA submission. However, the Department requires cost estimates to be provided using the **Best Practice Cost Estimation Standard** and at both **P50 and P90**. Also to use **both 4% and 7%** for BCRs.	- Project Goal and Objectives are set out in Stage 1-6 template (Goals) - Deliverables are set out in Stage 1-6 template (Option Generation and Assessment) - Funding is sought for the Planning and Design Phases of the Project. Funding from Nation Building 2 is sought to undertake the design of a Hobart Central Bus Interchange. The envisaged facility will improve low public transport usage, poorly perceived public transport travel amenities in Hobart CBD and improve integration between bus services. A planning project is currently underway, which will provide more detailed assessment and analysis of problems, and identify a preferred option for development (Planning Project). Design work would follow completion of the Planning Project. The estimated design cost is $1 million.
Alignment with objectives of NB2 Note: This should include how a project aligns with the overarching objective of NB2, as well as how it aligns with the objective of each relevant NB2 subprogram.	The Project is submitted under the *Innovation* theme of Nation Building 2 and also aligns with the *Connecting People* (Urban Living sub-program). The Project will improve public transport facilities in Hobart and support the enhanced provision of public transport services into the Hobart CBD.
Alignment with broader Commonwealth and state/territory policies and plans Note: Specific plans/policies to be addressed (at a minimum) include the Commonwealth's Infrastructure Investment Framework; the National Urban Policy; the National Ports and Land Freight Strategies; and the Australian Government commitment on the incorporation of ITS for major urban roads (as appropriate).	The Project aligns with the following Australian Government plans and policies: • Infrastructure Australia's theme for action 'Transforming our Cities'. • Infrastructure Australia June 2011 and June 2012 Report to COAG. • National Urban Policy. The Project also aligns with relevant State Government plans and polices: • Tasmanian Infrastructure Strategy. • Tasmanian Urban Passenger Transport Framework. • Southern Integrated Transport Plan. • Draft Capital City Plan. Further details are contained under Goal Definition

	(Stage1-6 template).
Overall financial exposure including identification of other partner funding Note: It is expected that this will be addressed in the main IA submission.	Details of cost estimates are outlined in the submission. The Tasmanian Government is contributing $75,000 to the current Planning Project, with both Hobart City Council and the Tasmanian Government providing in-kind support. The Commonwealth Government is contributing $125,000 to the Planning Project. In-kind contribution would be expected from the Tasmanian Government and Council in the delivery of the Design Project.
Identification of key strategic risks to the project Note: It is expected that this will be addressed in the main IA submission.	Risks associated with the Project will be defined in the associated Planning Project. Risks which have been identified to date include: • Uncertain costs of assessing heritage issues • Potential for disagreement as to priorities amongst project partners • Failure to identify an optimal solution(s) • Non-transport based priorities leading to preference for a non-optimal site.
Quantification of the expected benefits from the proposal Note: It is expected that this will be addressed in the main IA submission.	The Project is planning only; benefits cannot yet be quantified. Strategic benefits are discussed within the submission.
Information regarding the extent to which the potential for private sector involvement or investment has been evaluated Note: It is expected that this will be addressed in the main IA submission.	The potential for private sector investment and involvement will be considered during the Planning Project.

Likely impacts from the project proposal on citizens and the market Note: Detail is needed on how each proposal will impact citizens and the market (as two distinct groups) – positively or negatively, and the extent of the impact	The proposed bus interchange facility will have the following benefits for the community: • Reduced actual and perceived waiting times associated with public transport services. • Enhanced amenity, safety and comfort while using public bus services. • Much better ability to comprehend and access bus services The proposed bus interchange facility will have the following impacts on the market: • More effective use of space in the provision public transport services. • Improved operational efficiencies. • Provision of additional capacity to allow growth in the provision of public bus services during peak periods.
Identification of key stakeholders in the project and the complexity of stakeholder relationships	The State Government will actively work with key stakeholders, including the Hobart City Council, and bus service operators (Metro Tasmania, Tassielink, O'Driscolls Coaches, Redline) throughout the project. The State Government purchases or subsidies all Tasmanian bus operators and has a good commercial relationship with service providers. The above stakeholders will be represented on the project Steering Committee.
Extent of multijurisdictional and/or private sector involvement in the proposal	The Project does not have any interstate linkages or implications. The State Government will work with privately owned bus service operators.
Details of the level of innovation and information technology involved in the proposal, including in relation to information technology requirements to successfully manage/implement the proposal Note: Detail is to include identification of any new/untried methodologies or technologies to be used in the project, as well as IT requirements for the proponent agency to successfully manage or implement the proposal.	As part of the bus station facility, real time travel information will be installed (see Nation Building 2 submission: *Real Time Passenger Information*).
Details of the proposed procurement methods for the proposal Note: It is expected that this will be addressed	The design for the Central Bus Interchange facility would be delivered as a publicly tendered Contract, with pre-registered Tenderers.

in the main IA submission.	
Level of complexity in construction, and any known issues in relation to the construction of the project, including environmental and heritage considerations Note: It is expected that this will be largely addressed through the main IA submission. However, the Department requires sufficient detail to fulfil its probity and accountability requirements, so any additional information not explicitly addressed in the main IA submission should be provided here.	The site of the facility is unknown. It is likely that there will be some heritage issues given location of the facility in central Hobart. Complexity of construction will be determined as part of the project.
Any known issues in relation to contractual or service delivery obligations stemming from the proposal Note: This is to include any issues that are not currently present but could reasonably be foreseen.	There are no reasonably forseeable issues with contractual or service delivery obligations.
Details of the proposed governance arrangements for the proposal Note: This should be largely addressed in the main IA submission. However, the Department requires an explicit statement about the experience of the management team in delivering similar proposals and whether there are any expected knowledge gaps or training needs to successfully implement the proposal.	It is expected that the Steering Committee responsible for the Planning Project, would continue to have oversight of the design project. This includes representatives from DIER, The Hobart City Council and bus operators.
Details of the proposed delivery timetables and whether there are any known challenges to achieving those timeframes Note: It is expected that this will be addressed in the main IA submission.	The Planning Project is expected to be completed in Spring 2013. The Design project could be expected to commence in July 2014.
Details of any significant interdependencies for the project Note: It is expected that this will be addressed in the main IA submission.	The key interdependencies for the project are • The successful completion of the Planning Project • Community support for the preferred option identified in the Planning Project.

Proposal Summary

Initiative Name:	Hobart Central Bus Interchange Design
Location (State/Region(or City)/ Locality):	Hobart, Tasmania
Name of Proponent Entity:	Tasmanian Department of Infrastructure, Energy and Resources (DIER)
Contact (Name, Position, phone/e-mail):	David Spence, General Manager Infrastructure Strategy Department of Infrastructure, Energy and Resources Tel: (03) 6233 2089 Email: david.spence@dier.tas.gov.au

Executive summary

Funding is sought from Nation Building 2 to undertake planning and design work associated with the redevelopment of bus interchange facilities in central Hobart.

The project will achieve the goals (listed as outcomes) in the *Tasmanian Urban Passenger Transport Framework* which focus on:

- Reduced greenhouse gas emissions;
- Creating liveable and accessible communities;
- Improved travel reliability;
- Creating healthy, active communities; and
- Better integration of transport and land use planning.

A Planning Project for new interchange facilities is currently being undertaken by the Hobart City Council, Department of Infrastructure, Energy and Resources and bus operators in Hobart (Planning Project). The Planning Project will establish a comprehensive understanding of current arrangements and problems. Options to solve problems will be developed and analysed with optimal concepts developed. Aspects of transport services to be considered will be the location of passenger facilities, types of bus stops/terminal infrastructure, alternative kerbside use and bus route practice and designs. The Planning Project will conclude with a preferred option to be taken to public consultation.

This submission is being made as part of a set of inter-related actions, forming the Hobart Passenger Transport Innovation Program, which also includes:

- The Transit Corridor Project and Macquarie Street Bus Lane; and
- Real Time Passenger Information,

which are the subject of separate submissions under the Connecting People and Innovation Themes. These projects also focus on goals to encourage modal shift and increase public transport patronage.

The envisaged facility will help to address the problems of low public transport usage, poorly perceived public transport travel amenities in Hobart CBD and lack of integration between bus services.

Is this a new submission?	New submission
Estimated cost of problems?	To be confirmed following completion of Planning Project
Estimated Capital Cost of Initiative by Proponent ($M, nominal,	$1.0 million

undiscounted):	
Commonwealth contribution sought by Proponent ($M, nominal, undiscounted):	$1.0 million
Other funding (source/amount/cash flow) ($M, nominal, undiscounted):	-
BCR by Proponent excluding Wider Economic Benefits	To be confirmed
Estimated program	
• Design work is expected to commence following completion of the Planning Project, due for completion November 2013 • Design Project commencement July 2014	

Goal Definition

Project goal

The strategic goal of the Hobart CBD Interchange is to:

- Increase public transport patronage in Hobart, by providing optimal public transport access, integration and amenity.

Specific goals of the Planning Project and proposed Hobart CBD Interchange Design Project (Design Project) are to:

- Increase patronage on public bus services travelling to and through the Hobart CBD.
- Provision of optimal central bus interchange and bus stops for public transport access across the Hobart CBD.
- Improve the amenity of bus travel, by providing for a high level of passenger comfort, safety and security while waiting for buses and transferring between bus services in the Hobart CBD.
- Provide public transport access points that better meet the needs of PT users.
- Improve the travel time reliability of bus services travelling into and through the CBD.
- Integrate regular passenger (bus) transport services into a single interchange facility or set of adjacent facilities.

Alignment with State Government policy and planning frameworks

Tasmanian Infrastructure Strategy

The *Tasmanian Infrastructure Strategy* provides the guiding framework for all infrastructure investment decisions across government.

The redevelopment of central interchanges is identified as a key focus under the "Passenger Transport - connected, liveable and healthy communities" section of the *Tasmanian Infrastructure Strategy* over the next decade.

The project aligns with the following Strategic Directions in the *Tasmanian Infrastructure Strategy:*

- ***Coordinated Infrastructure Planning:*** The project will be developed in conjunction with the Hobart City Council, Metro Tasmania and other bus service operators. These organisations have responsibility for land use and transport planning and delivery of bus services throughout Hobart and to Central Hobart. A key element of the project is to better integrate transport services.
- ***Effective Governance and Decision Making****:* Involving key stakeholders as part of the project, regardless of jurisdictional ownership and responsibility, will deliver a better integrated public transport system.
- ***Viable and Sustainable Infrastructure:*** The project focuses on improving the existing public transport system, as opposed to developing new infrastructure. The project concentrates on developing public transport to cater more effectively for users and ensuring that it is an attractive alternative to the car.
- ***Efficient Infrastructure Delivery:*** The project focuses on developing an integrated plan, where responsibility for improving the public transport system is developed jointly and shared between the different jurisdictional authorities.

Tasmanian Urban Passenger Transport Framework

The project goals are derived from the *Tasmanian Urban Passenger Transport Framework* (Framework).

The Framework articulates priorities in terms of implementing the Passenger Transport elements of the *Tasmanian Infrastructure Strategy*, supported by the regional-level *Southern Integrated Transport Plan*.

The Framework seeks outcomes at a State-level as follows:

- Reduced greenhouse gas emissions by encouraging the use of low carbon emission transport such as public transport, walking and cycling.
- Creating liveable and accessible communities through encouraging land use patterns that integrate with the public transport system to improve the attractiveness and effectiveness of public transport, walking and cycling options.
- Improved travel reliability by providing consistent travel times, in particular, the overall time of undertaking a journey, including waiting times for all users of the transport system.
- Creating healthy, active communities by encouraging use of walking and cycling trips either as part of a trip or for the total trip.
- Better integration of transport and land use planning to ensure transport and land use planning system are integrated and work together to support an attractive and effective passenger transport system.

The Framework specifically identifies the development of high quality bus interchange facilities as a key action to support wider improvements to public transport in Greater Hobart.

The Framework was developed, in part, from the *Hobart Passenger Transport Case Study,* which was commissioned by the Tasmanian Government in 2009 to better understand the

issues facing the urban passenger transport system and to develop appropriate, sustainable responses that meet Tasmania's long term challenges.

As part of the review of travel demand measures, the following observations were made with regard to interchange facilities in Hobart:

"*Build a Bus Interchange*

Similar to car and air travel, public transport riders desire a high quality service and supporting facilities. The key to increasing travel by bus is to attract choice riders who have the option of driving. There are no high quality indoor bus waiting areas in Greater Hobart.

Comfort, dignity and convenience will be critical incentives for attracting choice riders to travel by bus. In addition, Greater Hobart's public transport interchanges are traditionally poorly integrated with suburban centres, and Hobart's bus mall is reaching capacity.

It is recommended that DIER and Metro undertake a comprehensive study to determine the needs of future passenger transport centres and hubs and possible infrastructure improvements. In particular, it is recommended that steps be initiated to identify a suitable location for such a facility in the Hobart CBD. A central location benefits travellers from the entire region. A successful model of a high quality bus interchange is provided in the Christchurch, NZ central business district.

There are significant opportunities for redevelopment of public transport interchanges in Hobart. The provision of interchanges with accessibility to a range of services and frequencies can enable seamless travel and transfers to occur. A passenger transport interchange may provide the following:

- *High quality, lounge style indoor waiting areas.*
- *Bike/public transport integration – this could be suitable where the distance to a service or interchange is too far to comfortably walk. In urban environments it would enable a cyclist to commute part of their journey. Bike lockers and repair shops might also be provided at the interchange.*
- *Retail and other amenity services.*
- *Restrooms.*
- *Pre-boarding ticketing and real time information.*
- *Inter and intra regional passenger services (i.e. bus and coach services)."* [1]

Southern Integrated Transport Plan

The *Southern Integrated Transport Plan* (Plan) developed in partnership with the Southern Councils was released in 2010. The Plan provides the strategic framework for planning and investing in Southern Tasmania's regional transport system over the next 20 years. The Plan contains actions to implement the *Tasmanian Urban Passenger Transport Framework*. The Plan contains objectives and strategies to encourage and support the greater use of passenger transport.

Draft Capital City Plan

[1] *Future Land Use and Transport Scenarios Discussion Paper*, November 2009, p33

In 2009, COAG announced reforms aimed at ensuring that all Australian capital cities would have comprehensive and integrated strategic plans in place by 2012. The Tasmanian Government has prepared a draft Capital City Plan for Hobart which collates State, regional and local Government policies into a strategic document.

The plan develops an integrated strategic framework of actions and priorities to guide Government and utility providers in their investment and planning decisions. Objectives and directions in the Plan support the Real Time Passenger Information project.

A stated objective of the Hobart Capital City Plan (H.30) is to improve transport networks, services and infrastructure connections to provide real modal choice and meet people's diverse travel needs including:

- public transport services,
- pedestrian and cycle linkages; and
- targeted infrastructure upgrades.

A key direction under this objective is to:

"*Improve the Integration of Passenger Transport modes"*.

A transport network initiative in the Plan, identified for implementation is:

"*Investigate and implement off-bus infrastructure to provide a highly visible, comfortable, safe environment for passengers."*

Inner City Action Plan, Hobart City Council

In response to the 2010 Gehl Architects' Report, *Hobart 2010 Public Spaces and Public Life - A city with people in mind*, the HCC has prepared the Inner City Action Plan. This Plan includes consideration of the redevelopment of the existing bus mall, identifying the need to 'Redesign the Bus Mall to increase its efficiency and improve its desirability as a people place.

The following is an extract from the Gehl Architects Report (at p 39):

"A central situated bus mall

Hobart Bus Station, more commonly referred to as "Hobart Bus Mall" is a section of Elizabeth Street located between Macquarie Street and Collins Street, which serves as Hobart's primary bus terminus in Hobart's city centre. There are also several stops located in nearby Franklin Square. The bus mall lies central to the retail heart including many leisure activities of the city centre

Hobart Bus Station is utilised by thousands of commuters every day, bringing city workers into Hobart from outlying suburbs, and the neighbouring cities. Approx. 850 buses move through the bus mall every day.

Poor quality of public space

It is important to remember that time spent on the bus represents only a portion of the experience for bus users. For the rest of their journey, public transport commuters are pedestrians. Therefore the quality of the bus system should not be judged by the bus journey alone, but also by the net effect that bus traffic has on the public realm and on the walking

environment. Often the quality of the public spaces linked to important bus stops or bus routes is poor.

An uneven layout

The space for bus traffic is fairly generous and pedestrians is cramped on the narrow footpath. There are 23 per cent space for pedestrian compared to 57 per cent space for buses. The survey of pedestrian traffic on a weekday between 8am - 6 pm, recorded large volumes of pedestrians in the bus mall; a total of 17,000 pedestrians. The highest volumes of pedestrians were found between 8am - 9am and between 12pm - 5pm."

Current projects

The Planning Project is being conducted by the Hobart City Council, and funded from the Liveable Cities Program, with support from the Department of Infrastructure, Energy and Resources and bus operators in Hobart. The Planning Project will establish a comprehensive understanding of current arrangements and problems. Options to solve problems will be developed and analysed with optimal concepts developed. Aspects of transport services to be considered will be the location of passenger facilities, types of bus stops/terminal infrastructure, alternative kerbside use and bus route practice and designs.

The Planning Project will conclude with a preferred option to be taken to public consultation.

The Hobart CBD continues to be the major destination for all trips undertaken by the people of Hobart. About one third of trips from Local Government Areas (LGA) outside Hobart end in the Hobart LGA.

About one quarter of all trips in Greater Hobart actually occur within the Hobart LGA.

Public transport in Greater Hobart, including the service to the Airport, is currently provided by the State-owned Metro Tasmania and three contracted private service providers (Tassielink Bus and Coach Services Tasmania, O'Driscoll's Coaches and Tasmanian Redline Coaches). Bus services operate from many of kerbside locations throughout the Hobart inner city. The Metro services are concentrated in the existing Hobart Bus Mall (an on-street bus mall arrangement located in Elizabeth Street between Collins and Macquarie Street) and there are pick-up and drop-off bus zones around the adjacent Franklin Square. Regional operators occupy less central positions within the inner city.

Alignment with Australian Government Planning and Policy Frameworks

Nation Building 2- proposal themes

The Design Project aligns with the Connecting People theme, under the Urban Living program. The project focuses on improving the access and amenity of public transport in the central area of Hobart. The project will enhance the community's access to services and improve the liveability of urban areas throughout Greater Hobart.

Infrastructure Australia's strategic priorities

The Design Project aligns with the principles set out in Infrastructure Australia's theme for action 'Transforming our Cities'.

The Infrastructure Australia June 2011 Report to COAG, outlines the following principles, which are relevant to the current Planning Project and proposed Design Project:

- ***Making better use of existing networks:*** the project focuses on improving existing passenger transport networks and supportive infrastructure. The intent is to ensure that the existing bus-based passenger transport system operates as effectively and efficiently as possible.
- ***The efficient movement of public transport:*** the project focuses on improving the travel time reliability of public transport services, through measures such as bus priority, removing diversions from the Corridor (to ensure the route is as direct as possible) and bus stop optimisation.

The Design Project also aligns with key priorities outlined in the June 2012 report to COAG:

- ***Improved strategic planning:*** the project focuses on better integration of transport and land use planning through the provision of more accessible and effective public transport services. The associated planning project has the following project partners.
    - Department of Infrastructure, Energy and Resources.
    - Hobart City Council.
    - Metro Tasmania (major metropolitan bus service provider).
    - Tasmanian Bus Association.
- ***Maintaining productivity:*** the project focuses on improving passenger transport effectiveness by reducing the actual and perceived trip travel time of patrons, as well as improving the efficiency of service departure points in the Hobart central area. A number of operational inefficiencies and capacity constraints would be eliminated by a redesigned facility.
- ***Improving liveability and social cohesion:*** the project will lead to improved liveability and social inclusion through making public transport more reliable and attractive (eg through improved amenity) and reduced waiting times. The facility will improve access throughout Hobart. This will have benefits to those that experience transport disadvantage.

National Urban Policy

The Australian Government released its National Urban Policy – *Our Cities, Our Future* – in May 2011. The policy notes that liveable cities "are equitable, socially inclusive, affordable, accessible, healthy, safe and resilient".

There is a need for Greater Hobart to be serviced by a more effective, integrated public transport system in order to create a greater mode share for public transport. This closely aligns with the goals, objectives and principles of the National Urban Policy. The alignment of project objectives was demonstrated in the successful funding application for the Hobart Central Bus Interchange Planning Project in the Liveable Cities Program.

The *National Urban Policy* sets out a number of important objectives and priorities to guide planning and development of our cities which focus on enhancing productivity, sustainability and liveability. The project aligns with the following objectives and priorities in the *National Urban Policy*:

- Investing in urban passenger transport, particularly public transport.

- Improving accessibility and reducing dependence on private vehicles by improving public transport options.
- Improving the efficiency of urban infrastructure by utilising smart infrastructure and demand management to enhance the performance of existing infrastructure networks and reduce the need for costly new investment.

Problem identification, assessment and analysis

Problem identification

The *Tasmanian Urban Passenger Transport Framework* identifies a set of key challenges, largely reflecting the existing private car-oriented transport system.

These challenges include:

- Dispersed suburbs and separation of land uses;
- Continued access to cheap, convenient end of trip parking;
- Focus on cars and road infrastructure;
- Increasing private vehicle kilometres, and longer trip distances;
- Complex transport needs- encompassing a variety of purposes including work, educational and recreational components;
- Low use of alternative transport modes; and
- High cost of the transport system.

The Planning Project is one element of the co-ordinated response described in the Framework to address the low use of alternative transport modes. The low use of alternative modes may be viewed as symptomatic of other problems, leading to a high reliance on cars. However, the failure to attract a higher proportion of trips already suited to public transport (eg direct, short trips on existing high frequency corridors), indicates that aspects of the public transport system itself contribute to low patronage and act as barriers to modal shift for those people who have a choice in mode.

In the development of the funding submission for the Liveable Cities Program, the following localised and network problems were identified that reflect how the existing Hobart CBD environment, in particular, inhibits the growth of patronage:

Poor integration of land use and infrastructure:

Dispersed bus interchange arrangements – the current bus interchange arrangements are dispersed across the inner city with significant walking distances and waiting times for passengers who are required to transfer between services. The current spatial locations and layouts are confusing and difficult to understand. Linkage between services is therefore difficult especially in times of outside peak periods (when service frequency is lower).

Inefficient use of urban infrastructure:

Operational inefficiencies – the current layout of the Hobart Bus Mall and Franklin Square bus zones is somewhat inefficient, resulting in operational problems from buses being impaired as they approach and depart. This causes travel time delays for passengers and extra running costs for buses. Improvement to bus access and priority into and out of the existing Hobart Bus Mall and the Franklin Square Bus Zones would improve operational

efficiencies for bus operators and make public transport more reliable and attractive for passengers.

Capacity constraints – the current configuration of the Hobart Bus Mall and Franklin Square bus zones results in bus congestion in peak periods. As increasing bus frequency is seen as a key measure in increasing public transport use, without significant improvement to the sequencing of bus scheduling there will be increases in the constraints on capacity in the future. While better service planning may ease some congestion, better configuration of the interchange (in terms of efficient use of bus stop space), could increase the current physical capacity of facilities.

Poor accessibility and high dependence on private cars:

Low public transport use - Greater Hobart has the lowest rate of public transport use for people travelling to work or study, compared to other States at 6.1 per cent (National Average 14 per cent). Significant numbers of people use private cars as their transport. The low modal share for public transport may in part relate to individual perceptions around convenience, safety, amenity and access.

The Hobart City Council has conducted research that shows community members do not find current bus facilities welcoming or functional and at times they are considered to be unsafe. Work undertaken by Jan Gehl (Gehl Architects) for Hobart City Council in assessing the Hobart Inner City as part of the first stage of a wider *Inner City Development Plan* notes that public transport facilities in the Inner City are seriously in need of attention.

Based on research of pedestrian movements undertaken in the Gehl Architects Hobart study, the current Elizabeth Street bus interchange has the second highest level of pedestrian movements in the Inner City. The current configuration of the bus interchange results in conflict between pedestrians, bus passengers and buses.

Poor perceptions of waiting times – the existing interchange exaggerates perception of waiting times for public transport. Research shows that perceived waiting times for public transport is the most annoying component of a bus trip and therefore any attempts to minimise perceived waiting time would be an effective way of increasing public transport usage. Minimising the perceptions of waiting times can be improved through better information such as real time travel information, greater reliability of bus services through creating better bus access to the interchange and providing better amenity, comfort and security.

Poor community wellbeing:

Poor amenity – the current interchange area has poor levels of amenity and a lack of a sense of place. There is a lack of effective shelter and the waiting facilities and toilets do not cater well for certain groups of people who may be transport disadvantaged such as the elderly, people with disabilities and single parents.

Problem analysis

More detailed analysis of the identified problems will be conducted during the first two stages of the Planning Project. These are:

Stage 1 Audit of current facilities and services

An audit of the current infrastructure in the Hobart CBD (ie. bus stops, shelters and waiting rooms, public conveniences, information outlets, luggage storage as well as critical layover, driver ablution and related facilities) will be undertaken for all current bus operators.

Current bus service plans (service timetabling and bus routes particularly access arrangements to the current interchange) and current patronage levels, along with origin and destination data, will also be documented and analysed, where feasible.

Existing and future trip attractors in the Hobart CBD will also be mapped to inform later option development.

Stage 2 Development of passenger and operational needs scenarios

Patronage growth expectations and targets will be produced for short (1-3 years), medium (3-10) and long term (10 plus) time horizons. A current growth trajectory and a high growth trajectory will need to be calculated.

Passenger needs will be considered, including walking distances and physical impediments to convenient access.

Option Generation and assessment

Based on the research conducted through the Hobart Passenger Transport Case Study (Case Study), the Framework describes a set of mutually supportive actions/measures designed to respond to these challenges.

A high-level, multi-criteria analysis was used in the Case Study to select and prioritise the specific recommended actions (see Table 2-1).

The Framework targets seven particular aspects of public transport services for improvement. These are:

- Improving frequency and span or services;
- Development of off-bus infrastrcuture;
- Pricing mechanisms;
- Better provision of information;
- Integration of modes;
- Delivering transit priority on key corridors; and
- Marketing services.

It is recognised that the optimal central bus interchange facility would need to be supported by:

- High frequency bus services from defined public transport transit corridors;
- Bus priority, especially to and from the facility;
- Off-bus infrastructure, such as improved bus stop infrastructure and information; and
- Changes in services to allow integration between them, especially when waiting periods are longer during off peak periods.

Table 2-1: Summary assessment of potential TDM options

	Greenhouse emissions	Implementation cost	Operation cost	Accessibility + social equity	Safety	Health (activity)	Cost to user	Difficulty of implementation
Road/infrastructure based solutions								
Provide road capacity	x	$$	✓✓✓	✓			✓✓	**
Reduce road capacity	✓✓	$$	✓✓✓	✓✓	✓✓	✓	✓✓✓	*
LATM	✓	$	✓		✓✓	✓	✓	*
HOV lanes		$	✓				✓	**
Rideshare		$	✓					***
Car club		$$		✓✓			✓	**
Passenger transport								
PT improvements – service	✓✓	$$	✓	✓✓✓	✓	✓		*
PT improvements – infrastructure	✓✓	$$$	✓✓	✓	✓	✓		***
Taxi improvements					✓✓✓			*
Active transport								
Cycle planning	✓		✓✓✓	✓✓	✓✓	✓✓✓	✓✓✓	*
Pedestrian facilities	✓✓		✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓	*
Cycle/transit integration	✓		✓✓	✓	✓✓	✓✓✓		**
Land use planning								
Contemporary neighbourhood design	✓	$$	✓✓✓	✓✓				**
Location efficient development	✓	$$	✓✓✓	✓				*
Transit oriented development	✓✓	$	✓✓✓	✓				**
Car free planning	✓✓✓			✓✓✓				***
Shared parking	✓		✓					**
Market based								
Road pricing	✓✓✓		✓✓					***
Fuel taxes	✓✓	$$$	✓✓✓	x			x	***
Parking pricing	✓	$$	✓	✓			x	*
Consumer financial incentives	✓	$$	✓	✓			✓✓✓	*
Consumer and organisational								
Peak spreading								**
Telecommuting	✓							*
Individualised marketing	✓							*
General TDM marketing			✓✓				✓✓✓	**

$ lowest cost $$$ highest cost

✓ fair performance/low cost to user ✓✓✓ excellent performance/high cost to user

* relatively easy to implement *** difficult to implement

The Design Project is therefore submitted for consideration as part of a set of inter-related actions, forming the Hobart Passenger Transport Innovation Program, which also includes:

- The Transit Corridor Study and Macquarie Street Bus Lane; and
- Real Time Passenger Information,

which are the subject of separate submissions under the Connecting People and Innovation Themes. These projects also focus on goals to encourage modal shift and increase public transport patronage.

Parallel work is being undertaken by the Tasmanian Government to deliver service improvements, focussing on a corridor-based service model, with targeted improvement in service frequencies and span.

In combination, these projects will result in a much higher standard of public transport across metropolitan Hobart. It is clear the Hobart CBD Interchange has a critical role in this staged improvement to the city's public transport system. However, the precise manner in which it fulfils that role will only be confirmed following completion of the Planning Project.

Option generation and assessment for the Interchange will be completed during the third and fourth stages of the Planning Project.

Stage 3 Development of Inner City interchange options

This stage will identify Inner City interchange options based on the information collected in the previous stages. The options will need to consider the following:

- The accessibility of the bus interchange to the CBD and key trip attractors.
- The efficiency of bus movements, including access to and from the interchange and through movements. The effective use of space within the interchange in terms of bus stop arrangements, ability to cater for future growth and create an integrated bus interchange. Metro's Bus Depot Optimisation project outputs will be utilised as part of this to determine Metro's layover needs within the CBD.
- Confirmation of possible future service plan arrangements which could service the passenger needs scenarios.
- Improving the amenity of the interchange in terms of passengers waiting facilities, information, safety and security.

A detailed comparison of options will be undertaken at this stage in order to identify the most feasible options for more detailed analysis in Stage 4.

The utilisation of through-CBD route services, as opposed to a system which involves all services terminating in the CBD, will also need to be considered. This may reduce passenger and bus footprint requirements at the interchange and, for some passengers, waiting times at the bus interchange.

Off-bus infrastructure requirements will be estimated to cater for the various time horizons and passenger expectations of what should be provided. This will include the need for facilities such as passenger waiting space and seating requirement footprints, information services (including real time passenger information), directional information, way finding information, public ablutions and other amenities.

During this stage, a series of options for the various time horizons/growth scenarios will be developed.

Stage 4 Analysis and selection of preferred option for each time horizon

The final deliverable of the Planning Project will be a Plan that sets out a preferred program of improvements in the short, medium and long term including provision of an optimal central bus interchange facility. Other recommendations for network and service improvements will be produced as required. The Plan will include cost benefit analysis (suitable for future funding application) of the preferred option(s).

Optimal Option

At this point in time it is not possible to determine an optimal solution. The Planning Project will generate a set of options which are likely to be in the form of an optimal central bus interchange facility (recognising the potential impact of decisions such as routing of services and street design on the exact nature of that option). The precise location, form and type of such a facility will be determined in the course of the Planning Project.

Funding from Nation Building 2 is sought to undertake full design of an optimal solution, including extensive public consultation. The preferred option is expected to rectify the dispersed bus interchange arrangements, address inefficient use of urban infrastructure and improve pedestrian accessibility. The facility will help to counter the poor perception of public transport waiting times in Hobart, as well as the poor level of current amenity.

Given the nature of the project involving the potential development of a facility in the historic Central CBD area of Hobart, allowance for assessing heritage impacts must be made.

The design cost associated with the Design Project has been estimated at $0.6 million with public consultation estimated at $0.4 million. The total amount requested is $1.0 million.

Summary of funding request

Funding is sought for the following items:

- Full design of optimal solution, including detailed engineering design ($0.6 million).
- Public consultation, including project management and conduct ($0.4 million).
- Development Application (cost included in consultation).