

Monday, 25 February 2013

LIGHT RAIL VISION MISSES THE POINT

Representatives of public transport operators today said supporters of the Hobart to Northern Suburbs Light Rail care more about transport modes than outcomes.

"Some supporters of this project are calling it a matter of social justice. What about social justice for the other 95 per cent of Tasmanians who live in areas that won't be serviced by the light rail?" said Geoff Lewis, General Manager of the Tasmanian Bus Association.

"The money for light rail would be much better spent on transport, health, welfare and education services across the whole of the state rather than on one short piece of rail," said Lewis.

"The cost to benefit ratios, across a range of scenarios in the final report tell us this project will provide too little for far too much money and they don't even tell us what the forgone costs of spending the money are in other areas such as transport and health," said Lewis.

"This is an ideologically driven project. It is based on a national Greens philosophy where they see the only form of urban public transport as light rail when we know buses carry millions of passengers a day and get to areas rail can't reach," said Michael Apps, Executive Director of the Bus Industry Confederation.

"Similar to the Australian Capital Territory a Coalition Government involving the Greens is building an expensive light rail system that they don't have the money to deliver, at the expense of services which would benefit the whole community," said Apps.

Mr Apps said the report for the ACT Government's Gunghalin to City Rapid Transit project showed an equivalent bus rapid transit system would produce a much higher cost to benefit ratio than a light rail, but that this was ignored in favour of light rail under pressure from the ACT Greens.

"Rather than focusing on the mode, the whole project should be focused on the rapid transit corridor and consider all of the options for that corridor. Bus rapid transit provides all of the same characteristics as light rail at a margin of the cost, even the vehicles can look like light rail," said Apps. (Photos available on request)

"We think it is wasteful that supporters of this project intend to lobby Canberra for money at a time when the State Government is telling us Tasmania is in financial strife and the Federal Government is cutting costs," said Lewis.

"At the end of the day politicians will make decisions and light rail might be the choice of the governments of the day, but you have to get the money first.

"Putting all your eggs in one basket and mounting a campaign to get Federal funding for this project is short sighted and opportunistic," said Apps.

"Tasmania no doubt will be important in the context of the Federal Election result, but what certainty does a pre-election promise to fund light rail really provide?



"A rapid transit corridor proposal should be presented in a professional way that considers all of the possible options about the mode of choice and the route.

"Ideally we would want to see any future feasibility studies for this project include bus rapid transit options to compare with light rail.

"At least then any Federal funding decision can be based on facts and not an attempted pork barrel," said Apps.

"The same principle should apply to the Sunshine Coast where the decision to build light rail was made ahead of the feasibility study being undertaken, a study which should look at all options for rapid transit, not just light rail.

"The idea that Infrastructure Australia would fund a project which at its highest level of benefit barely scrapes above even is ridiculous," said Apps.

"The Government is aware of this which is why they want to shorten and change the route away from its original design, to maximise the cost to benefits ratio and make a better case for funding from the Federal Government," said Apps.

"If the original designers and advocates of this project were serious about good public transport outcomes like they say they are, instead of just being obsessed with rail, they would oppose the light rail route being completely changed," said Apps.

--ENDS-

Geoff Lewis, Tasmanian Bus Association, 0409 287 678 Michael Apps, Bus Industry Confederation, 0418 487 930

BACKGROUND

Images of Bus Rapid Transit vehicles are available from TasBus on Request.

About TasBus

TasBus is the peak body representing the Tasmanian Bus and Coach industry.

TasBus Members include:

Phoenix Coaches, Manions Coaches, Calows Coaches, Tasmanian Redline Coaches, O'Driscoll Coaches, Tassielink Transit, Metro Tasmania

The goals of TasBus are to work in cooperation with community and the Tasmanian Government to:

- Protect the ongoing viability of the Tasmanian Bus and Coach Industry.
- Develop and implement policies that improve the efficiency and professionalism of Tasmanian bus operators.
- Provide assistance and advice to bus operators on issues which will impact on their business.
- Promote unity within the industry.



- Promote unity between the industry and the community.
- Encourage sustainable growth of bus operations.
- Promote mobility and accessibility for Tasmanian communities through the use of mass passenger transport systems
- Encourage Government investment into mass passenger transport in the form of services, support for modern and safe vehicles and network infrastructure

The full TasBus policy statement and other materials are available at www.tasbus.com.au.

TasBus has identified a number of small scale projects and programs for consideration by the Tasmanian Government.

We urge the Government to recognise the state-wide benefits these projects may bring ahead of an \$100 million investment in the Northern Suburbs Light Rail which will only bring benefits to a specific area of Hobart.

We see these measures being taken alongside an overarching audit of existing transport systems to make them better and more efficient.

This audit would assess:

- Urban fringe services in the Hobart, Launceston, Devenport and Burnie areas for frequency and level of service to determine where these can be improved using existing resources.
- Statewide mobility and public transport services to identify "transport poor" areas, particularly rural and semi rural where additional bus services are required.
- High risk routes where newer and safer vehicles should replace older vehicles in the fleet.
- Where small scale priority measures for bus services would improve running times for bus services.
- The integration of transport considerations with land use zoning at a council level across Tasmania and develop a framework for improving integration.

Programs and Policies for Consideration by the Tasmanian Government

- Introduce an integrated state-wide ticketing system with tag on and off capabilities, supported by real time passenger information and web based journey planning.
- 2. Investment in the state wide bus fleet with the aim of bringing the average of age of the fleet down to 12 years by 2020.
- 3. Relocation of the Hobart Bus Mall to an area which will provide efficient interchanges between urban, urban fringe and long distance services.



- 4. In line with the findings of a review into the industry provide \$3 million in funding to upgrade the fleet of rural school buses along identified high risk routes.
- 5. Establish a transport strategy for Tasmania's West Coast
- 6. Review area between Wynyard and Latrobe/Port Sorell with view to providing seamless bus services within and through the area.
- 7. Improve transport hubs bus stops and signage.
- 8. Appoint transport coordinators in regional hubs to improve connectivity between community transport and public transport.
- 9. Introduce bus priority signalling systems for buses in major towns across the State.
- 10. Expansion of the bus lane on the Southern outlet and development of similar bus lanes throughout the road network to deliver quicker travel times for bus passengers throughout the state.
- 11. Develop better pedestrian and cycle access to major bus stops.
- 12. Build more off-road cycle paths and improve footpaths in built up areas.
- 13. Further Investment into school bus safety



Bus Rapid Transit versus Light Rail the Facts

What is Bus Rapid Transit?

Bus Rapid Transit (BRT) is a high-quality bus based transit system that delivers fast, comfortable and cost effective urban mobility through¹:

- The provision of right-of-way infrastructure.
- Rapid and frequent operations.
- Excellence in marketing and customer service.

A BRT system can use existing road systems, use small scale improvements to bus travelling times (BRT Lite) or be built with dedicated pathways and station systems depending on the resources available for the project.

Key features of BRT systems include²:

- Segregated bus ways or bus-only roadways predominantly in the median of the roadway;
- Existence of an integrated network of routes and corridors;
- Enhanced stations that are convenient, comfortable, secure and weather protected;
- Special stations and terminals to facilitate easy physical integration between trunk and feeder systems and other mass transit systems where they exist;
- Improvements to nearby public space;
- Low emissions and noise vehicle technologies;
- Signal priority or grade separation at intersections.

BRT offers cost effective, environmentally beneficial and high performance mass transit where population density often does not justify the construction of costly fixed rail systems and the need for greater flexibility in route mapping is better served by wheel-to-road transport systems.

BRT Systems in Australia

There are BRT systems in operation throughout capital cities in Australia including the Brisbane Busways System, the Adelaide Busway and the Sydney to Liverpool Transitway and the Melbourne Smart Bus System.

The Cairns Transit Network, to begin construction in 2013, is the first BRT system to be implemented in a non-capital city.

The network will improve public transport by giving buses priority by either providing separate transit lanes or dedicated bus-only roads.

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¹ Wright, L. and Hook, W (eds). 2007, *Bus Rapid Transit Planning Guide*, Institute for Transportation and Development Policy, New York.

² Ibid.,



The ACT Government has announced a Busway system for the south of Canberra to begin construction in 2013 and is considering BRT for the Northbourne Avenue precinct rapid transit system.

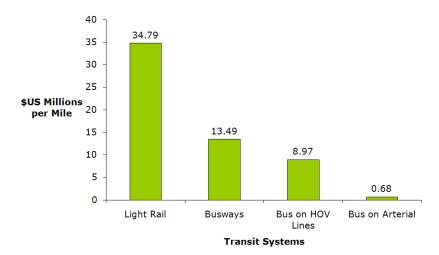
How much does BRT cost?

A BRT system will typically cost 4 to 20 times less than an equivalent Light Rail system and up to 100 times less than an equivalent metro rail system.³

There are a number of ways in which BRT can save on cost:

- BRT systems can save millions of dollars in cheaper initial build costs and construction times as well as reductions in traffic and neighbourhood disruption during construction.
- BRT systems can carry the same number of people as light rail systems for a typical cost of four to twenty less times than an LRT system and 10 to 100 times less than a heavy rail system.
- By using existing road systems BRT can be built in phases and integrated with existing road systems.
- BRT offers almost immediate public transport solutions and comes with cost effective expansion options.
- For the Australian urban environment the build cost of the Busways system in Brisbane is
 estimated to be \$10million per kilometre less than the costs of an equivalent LRT system and
 the Adelaide North East Busway at less than \$10 million per kilometre in infrastructure costs
 is significantly cheaper than any LRT options.⁴

Figure 1: Capital costs per mile of Light Rail versus BRT systems⁵



³ Wright, L. and Hook, W (eds). 2007, *Bus Rapid Transit Planning Guide*, Institute for Transportation and Development Policy, New York.

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⁴ Currie, G. 2006, Bus Rapid Transit in Australasia: Performance, Lessons Learned and Futures, Journal of Public Transportation, 2006 Special Edition

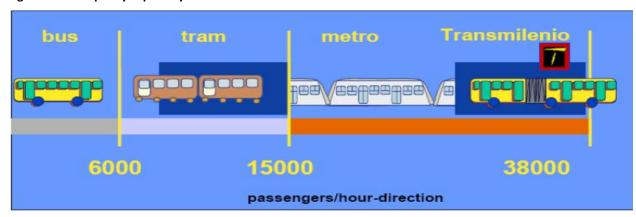
⁵ Ibid.,



How does BRT Perform as Mass Transit

- BRT has been very successful in attracting ridership growth on operating corridors throughout
 the world and has demonstrated great success in moving existing public transport users and
 motor vehicle users on to mass transit in Brisbane and Adelaide.
- High performance BRT systems have the capacity to move around 40,000 passengers per hour in one direction.
- BRT offers operational flexibility by giving operators the opportunity to offer all-stop and express services in urban corridors.
- BRT roadways can be shared with high occupancy vehicles, taxis, off-peak freight vehicles and emergency vehicles to help ease urban congestion and improve road safety.
- By presenting the opportunity for a "Rail- Like" look and feel at a significantly lower vehicle cost BRT can attract users who normally avoid bus-based public transport.

Figure 2: The capacity capability of various modes of mass transit⁶



What are the Benefits of BRT?

In corridors where it has been implemented Bus Rapid Transit (BRT) has delivered well documented modal shift travel time savings and operational benefits.

There has been less documentation of the secondary and co-benefits of BRT in relation to pre-existing bus systems and in comparison with alternative modes such as light rail.

Secondary benefits flowing from the implementation of BRT include:

- Land use positive changes to land use including transit oriented development.
- Land value impacts of BRT on land value along corridors and in relation to distance from station.
- Accessibility increased accessibility to public transport along BRT corridors.

⁶ Hensher, D. 2008, *Frequency and Connectivity: the Key Drivers of Reform in Urban Public Transport Provision*, Institute of Transport and Logistics Studies, University of Sydney.

⁷ Currie, G., and M. Sarvi. 2012. A New Model for the Secondary Benefits of Transit Priority, Paper Number 12-0720, submitted for publication and presentation, Transport Research Record.



- Modal shift to walking and cycling increased pedestrianisation of land and consequent impacts on mode share of active transport.
- Employment ancillary growth in employment as a result of BRT related development.
- Time savings in bus operating times five minutes and eight to nine minutes generate secondary benefits by causing mode shift.
- Time savings above nine minutes acting to change land use in a positive manner.

Positive land use impacts related to BRT development are outlined in the following table.

Table 1: Land Development Impacts Related to BRT⁸

Authors	City	Year opened	BRT system	Land Development Impact
Rabinovitch and Hoehn (1995)	Curitiba	1974	Surface Metro	High density residential and commercial development occurred along BRT corridors.
Rodi´guez and Targa (2004)	Bogotá	2000	TransMilenio	After only 2-years of operation of BRT, residential rental costs increased between 6.8% and 9.3% for every 5 minutes walking time to BRT stations.
Rodríguez and Mojica (2009)	Bogotá	2000	TransMilenio	Network effects were found from the extension of BRT. The asking price of properties in the BRT catchment area was found between 13% and 14% higher than that in the control area.
Munoz-Raskin (2010)	Bogotá	2000	TransMilenio	Within a 10 minute walking distance to the Autopista Norte trunk corridor and to the Portal Norte feeder lines, the average annual property value increased 2.2% and 2.9% respectively.
Diaz et al. (2009)	Boston	2002	Silver Line	Development has accelerated along the Washington Street corridor. Silver Line Phase I has generated at least US \$ 93 million in new development, involving a mix of retail, housing and institutional uses.
	Las Vegas	2004	MAX	One casino operator has already invested in pedestrian facilities and an additional station.
	Orlando	1997	LYMMO	The local authority has used the BRT as a tool to promote development. 5 new office buildings with about 1 million square feet per building and 6 new apartment communities have been developed in the downtown, possibly resulting from BRT.
Levinson, Zimmerman, Clinger,	Pittsburgh	1983	East Busway	59 new developments within a 1500-ft radius of station. \$302 million in land development benefits, of which \$275 million was new construction.
Rutherford et al.	Ottawa	1987	Transitway	The construction of the Transitway has led to up to U.S. \$675 million in new construction around transit stations
(2003) and Levinson,	Adelaide	1986	Guided Busway	Tea Tree Gully area is becoming an urban village.
Zimmerman, Clinger,	Brisbane	2001	SouthEast	Property value near BRT stations grew 2 to 3 times faster than those located in
Gast et al. (2003)			Busway	non-busway suburbs.
DFT (2008)	Kent	2006	Fastrack	The second route was fully funded by the developer as part of the first major mixed-use regeneration project in the Thames Gateway.
Cervero and	Seoul	2004	BRT	Land use along BRT corridors was intensified. Within 300 metres of BRT stations,
Kang (2009)				residential land values gained premiums ranging from 5% to 10%; within 150 metres of BRT stations, non-residential land values gained premiums varying between 3% and 26%

Source: based on Deng and Nelson (2010a)

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⁸ Deng, T, and J.Nelson. 2010. The Impact of Bus Rapid Transit on Land Development: A Case Study of Beijing, China. World Academy of Science, Engineering and Technology 66.