

31 May, 2006

Draft Passenger Transport  
Network Plan  
Private Bag 92 236  
Auckland

## nzcid submission on the ARTA draft passenger transport network plan<sup>1</sup>

The New Zealand Council for Infrastructure Development considers ARTA's draft passenger transport plan sets out a logical long term development path for the region's public passenger transport services and offers a positive way forward to avert future gridlock in the city's transportation system.

However ARTA's ability to implement the plan is substantially compromised by the current requirement that long term investment in infrastructure must be fully funded within 10 years.

A potential solution to this problem would be the development of a business case that substantiates the proposed level of investment, particularly in rail infrastructure, and provides justification for longer term public or private debt financing of the infrastructure upgrade programme.

### inadequate funding horizon

The Auckland Regional Council has clearly stated that it is unable to fund its share of both the OPEX and CAPEX components of the plan. Central Government has indicated by reported media comment that it is concerned as to whether the capital investment in rail infrastructure, and particularly electrification of rail, can be economically justified.

These issues go to the core of the efficacy of the plan.

On the one hand the PTNP sets out to establish a capital investment programme, including relevant rolling stock and infrastructure upgrades, designed to meet the needs of the region in 40 to 50 years time. For this reason the plan proposes investment in capital assets which have an economic life of 30 years or more. On the other hand, the plan proposes that this be fully funded within a ten year horizon. Clearly, there is a mismatch between the funding horizon and the economic life of the assets being funded.

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<sup>1</sup> Note: This submission represents the views of NZCID as a collective whole, and may not necessarily represent the views of individual member organisations.

## economic justification

Having reviewed the information provided in the draft plan, it is not possible to assess whether the level of capital investment proposed in the RTN is economically justified, based on the projected levels of patronage.

Table 5.1 on page 39 of the draft plan set out the estimated capital cost for the RTN network at \$2.368 billion of which \$1.95 billion is directly for rail. This investment is projected to increase annual rail trips from 4 million in 2005 to 15.6 million in 2016, an increase of 11.6 million trips. In contrast, a \$418 million investment in bus transport is anticipated to increase bus patronage from 42 million trips in 2005 to 79 million trips in 2016, an increase of 37 million trips.

Table 1 below sets out comparative statistics for patronage and the average cost per trip by transport mode, based on the information provided in the PTNP and assuming linear growth in patronage over the ten year horizon, as is indicated within the draft plan.

**Table 1: Average cost per passenger trip by transport mode 2006 - 2016**

	<b>Total Passenger Trips 2006 to 2016 (000,000)</b>	<b>Opex 2006 to 2016 (\$000)</b>	<b>Capex 2006 to 2016 (\$000)</b>	<b>Total Capex + Opex (\$000)</b>	<b>Opex per Passenger Trip (\$)</b>	<b>Capex per Passenger Trip (\$)</b>	<b>Total Expenditure per Passenger Trip (\$)</b>
<b>Rail</b>	113.6	667,401	1,949,911	2,617,312	5.88	17.16	23.04
<b>Bus</b>	684.0	1,256,367	418,039	1,674,406	1.84	0.61	2.45
<b>Ferry</b>	59.0	64,848	39,700	104,548	1.10	0.67	1.77
<b>Other</b>		273,386	220,000	493,386			
<b>Total</b>	856.6	2,262,002	2,627,650	4,889,652	2.64	3.07	5.71

Under the funding mechanism proposed in the PTNP, the full cost of the plan, including capital expenditure, is to be fully financed through public funds within the 10 year plan timeframe. On this basis, the average cost per passenger trip served, over 10 years is:

- \$23.04 per trip for rail,
- \$2.45 per trip for bus,
- \$1.77 per trip for ferry.
- giving a weighted average of \$5.71 per trip over the ten year span of the plan

The relative high cost of rail trips is a reflection of the significant long term capital investment in that mode.

On the surface of the information provided and given the short term horizon in which the plan operates investment in bus and ferry passenger transport services appear to provide a much better return.

However it must be accepted that there are capacity constraints that limit growth of those modes beyond the forecast figures.

It may be the case that the rail investment is economically justified over the longer term. If this was so, longer term financing of the development programme through public or private debt may also prove to be economically justifiable.

### longer term public or private sector financing of capital infrastructure should be evaluated

NZCID therefore recommends the draft plan be enhanced to consider the option of long term financing of capital infrastructure development. In turn, this will require re-evaluation of the economics of the investment in rail infrastructure over the longer period versus alternative modes.

By this process it may be possible to present a case to government for potential securitisation of passenger transport subsidies against long term debt commitments.

The option of private sector financing of infrastructure development has not been considered within the plan as a possible funding option. Internationally a number of rail infrastructure projects have been financed by means of Private Public Partnerships and / or long term lease arrangements of rolling stock.

NZCID recently conducted an exploratory visit to the UK and Ireland to review such initiatives and met with both treasury and transport department officials in both countries. While there have been mixed results in terms of the success of the PPP model in the provision of rail services in the UK context, the Nottingham Express Transit system in the UK was noted by the Dept of Transport as providing an example of a successful implementation of such a scheme within a city of comparable size to Christchurch.<sup>2</sup>

There is certainly interest among private sector operators and financiers in developing the PPP model in the New Zealand context. Should the economic evaluation justify the level of investment proposed in the plan, it is possible that there would be interest by the private sector in making such an investment.

Yours faithfully,



Stephen Selwood  
Chief Executive

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<sup>2</sup> See: <http://www.nottinghamexpresstransit.com/homepage.asp>  
[http://www.pppforum.com/interviews/interview\\_Nottingham%20Light%20Rail.htm](http://www.pppforum.com/interviews/interview_Nottingham%20Light%20Rail.htm)