



MINISTRY OF TRANSPORT

**DETERMINING CITYRAIL'S REVENUE
REQUIREMENTS AND HOW IT
SHOULD BE FUNDED**

AND

**DECIDING ON THE STRUCTURE AND
LEVEL OF CITYRAIL FARES**

DISCUSSION PAPERS

SUBMISSION TO:

**INDEPENDENT PRICING AND
REGULATORY TRIBUNAL OF
NEW SOUTH WALES**

Submission to:

Independent Pricing and Regulatory Tribunal

for

Determining CityRail's revenue requirements and how it should be funded – Discussion Paper June 2008

and

Deciding on the structure and level of CityRail fares – Discussion Paper June 2008

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Part 1. Preliminary

1. Introduction

This is a Submission to the Independent Pricing and Regulatory Tribunal (IPART) in connection with the two discussion papers issued in June 2008 – one dealing with determining CityRail’s revenue requirement and how it should be funded and the other on the structure and level of CityRail fares.

2. Background

Government has requested IPART to undertake a review and provide, for Government’s consideration, recommendations on a preferred regulatory framework for CityRail, with the aim of providing incentives to improve the efficiency of passenger rail services.

As part of this review, IPART released an Issues Paper in October 2007 to which Government provided a submission in May 2007 and has produced two further Discussion Papers.

The purpose of this Submission is to provide to IPART high level commentary and observations on matters which the Government views as important for IPART to consider in finalising its recommendations on a preferred regulatory framework for CityRail.

However, it is noted that the matters raised are complex, there is a lack of robust data in key areas and it is difficult to objectively determine a definitive, optimal regulatory approach. On this basis, Government considers it appropriate to take the time to further analyse in detail the issues contained in the IPART Discussion Papers, informed by expert advice as necessary. This analysis will be made available to IPART to assist it in finalising its recommendations and will inform Government’s eventual consideration of them.

3. Outline of Submission

The outline and structure of this Submission are set out as follows:

- **Part 1:** Preliminary.
- **Part 2:** Discusses matters raised in the Discussion Paper on revenue requirements. Key issues considered include valuation of the capital asset base, valuing the external benefits of CityRail and the implications for fare setting.
- **Part 3:** Discusses matters raised in the Discussion Paper on the structure and level of CityRail fares. Key issues considered include the role of pricing as a capacity management tool, its impact in helping to improve efficient operation of the network and issues of equity and affordability for users.

Both Parts 2 and 3 are structured to address the issues on which IPART has sought feedback in the order they have been raised in the Discussion Papers.

Part 2. CityRail's Revenue Requirement

4. Length of the determination and timing of changes to fares

The rationale for the proposed four year price path for CityRail's fares is similar to the reasoning behind the Government's previously stated preference for a three year determination period. A longer-term price path would enable RailCorp to adopt a more strategic approach to managing performance and longer-term development projects, including the challenge of planning for network growth to meet State Plan targets. The four year framework also aligns to the budget and CityRail's capital forecasting processes.

However, given that this process effectively "locks in" fares – and fare increases – for the regulatory period, getting the starting point, including cost and patronage forecasts right will be crucial, both from Government's and passengers' perspectives.

Alternatively, a four year rolling period could be employed, with review points to allow for recalibration if required.

Recent experience with patronage forecasting, for example, has shown that the results are highly dependent on the level of information available at the time and, therefore, the assumptions made. Significant changes to external factors (such as fuel prices, employment levels and the availability of office space in the CBD) in the forecast period may lead to very different outcomes. Forecasting the impact of changes in costs outside RailCorp's control may also be difficult, particularly in the current economic environment.

Therefore, some scope for adjustments over the regulatory period may be required, potentially as part of a transition to a new regulatory approach.

The proposal to align the timing of introduction of changes to rail fares to that of other public transport modes is supported by the Government.

5. Approach to establishing CityRail's revenue requirement

The Government previously provided advice on the advantages and disadvantages of the application of each of the three regulatory models under consideration by IPART and notes this advice is reflected in IPART's Discussion Papers.

IPART arrived at its preference for adoption of the building block approach because IPART placed the most weight on the following two of the assessment criteria set out at Box 1.3 on page 6 of the Discussion Papers:

- Encouraging RailCorp to be more disciplined in its spending; and
- Promoting economic efficiency of rail services.

Stakeholders may benefit from a more detailed discussion of other matters, including an assessment of the building block approach against some of the broader assessment criteria, such as criteria 4 to 10.

In particular, the Government would welcome IPART's further examination of the implications of the approaches applying in other jurisdictions and of how practical, feasible, simple, and proportionate to the problem, the building block approach is, vis a vis other methodologies.

6. Total cost of providing CityRail's services

6.1 Establishing efficient costs

In order to determine the efficient costs of passenger rail services, IPART proposes to use a building block approach, which involves the estimation of both efficient capital costs and efficient operating costs.

In commenting on the potential reforms identified by LEK in order to reduce CityRail's operating costs, it is important to firstly recognise that Government policy settings will influence the level of CityRail service provision.

That said, the Government is committed to improving CityRail Services and is open to further examining possible efficiency reforms. This investigation would need to consider the impact on customers and the options to address those impacts, in the event Government determined reforms were appropriate.

For example, guards on CityRail services currently provide assistance to people with disabilities that impair their mobility, so that they can access CityRail services, particularly at unstaffed stations. RailCorp currently relies on this form of direct assistance to meet the physical access requirements of the Commonwealth Disability Discrimination Act (DDA) and the associated Disability Standards for Accessible Public Transport (Transport Standards).

Similarly, as part of meeting the information compliance requirements of the DDA and Transport Standards, guards also make announcements on older CityRail carriages to assist vision-impaired persons in identifying their stops and in making safety and emergency announcements. If there were to be changes in train crewing arrangements, alternative strategies would need to be developed and implemented.

Guards also perform important safety functions by getting off the train and checking that passengers have completed embarking/disembarking before the train pulls away from the platform, a function necessitated by the curved shape of CityRail platforms.

Notwithstanding these important roles, Government recognises that there may be scope to further improve the level of customer service provided by guards and station staff.

In this regard, it should also be noted that Government recently gave in-principle approval to testing the market with a view to procuring a single,

integrated, electronic ticketing system for Sydney's public transport network. It is anticipated that this system will deliver efficiency savings, improvements to operational performance and contribute to patronage increases. This market testing process will help establish the implementation timeframe for the new system.

Improvements to CityRail's customer service role and operational costs also need to be considered in this context.

Initial advice on the reforms proposed by LEK – and implicit in the Discussion Paper – is that achievement of the savings in the time frame proposed would be challenging and these savings could not be achieved without significant capital investment. IPART should consider undertaking further analysis before locking these assumed efficiencies into the price path. The fact that LEK's report indicates that LEK did not independently verify or audit the information provided to it on which its findings/recommendations are based, and that the accuracy and/or completeness of the information cannot be assumed, adds further weight to the need for a cautious approach.

6.2 Valuing the asset base

In order to estimate efficient capital costs, IPART proposes establishing an initial capital base (ICB) – which will become the regulatory asset base (RAB) for the purposes of establishing a price path for fares – using an estimate of the economic value of CityRail assets using a discounted cash flow analysis. IPART further proposes an approach to rolling forward the RAB each year; canvasses two scenarios for the treatment of the Epping Chatswood Rail Link (ECRL) in the RAB (ie: at zero or at \$2.3 billion); and suggests the adoption of an ex-post review of the “prudency” of capital expenditure, on the basis that only prudent capital expenditure would be included in the RAB.

The building block approach appears to be appropriate for the purposes of establishing the efficient costs of CityRail services and, if it is apparent that CityRail is not operating on an efficient cost basis, for establishing a process for implementing improvements. As such, this work should be used to feed into performance agreements between the Government and RailCorp.

However, as is implicit in the Discussion Papers, the different methodologies for valuing assets have a significant impact on the revenue requirement and, therefore, fares. The two options canvassed for valuing the Epping to Chatswood Railway Line (ECRL) is an example of this: considered against the proposed valuation basis for establishing the ICB, the inclusion of the ECRL at \$2.3 billion will result in a significant “lumpy” increase to the asset base, with a sharp flow on effect to fares. Including ECRL at a zero value will not impact on fares.

Conversely, if existing assets are included at their full value in the ICB, the inclusion of the ECRL at \$2.3 billion will not result in such a “lumpy” increase in the asset base – but has enormous ramifications for the revenue requirement and, therefore, fare levels.

For this reason, there are strong arguments that the whole of the asset base should be valued on a consistent basis, in order to establish the real (and, from this, efficient) costs of CityRail's services. In particular, it is important to avoid compromising the selection of the most appropriate method to use to estimate CityRail's efficient costs due to concerns over the impact this might have on passenger fares. Rather, when estimating CityRail's efficient capital and operating costs, the preferable approach is to use the method that produces the most accurate estimate of those costs. In this regard, it is noted that RailCorp's regulated income does not need to be directly tied the value of the asset base. Any increase in the asset valuation, and hence the notional revenue requirement, does not of itself necessarily increase the cash funding requirements for RailCorp, which could continue to form the basis for establishing both Government and farebox contributions to cost recovery.

This may suggest that an approach informed by, but not necessarily solely reliant on, estimates of efficient costs derived using the building block approach is the better way to establish appropriate base fare levels and future increases. That is, the estimation of efficient costs and the determination of fares should be treated as two quite separate, albeit related, activities. It is noted that IPART has recognised that, while issues like efficient costs should help inform a determination of the appropriate level for fares, there will inevitably be a requirement for a judgement to be made, given the range of inputs and competing factors that must be considered. In particular, the Government will need to consider CityRail's capacity to improve its efficiency and reduce its costs, as well as the ability of passengers to pay for any proposed increases in fares.

In this context, for the purposes of arriving at the appropriate methodology for valuing the existing asset base for the purposes of establishing the efficient cost of CityRail services, the Government would also welcome IPART's consideration of the following:

- Existing assets have a significant residual value beyond the value implied by the methodology employed by IPART. For example, the land value of rail corridors and station sites is considerable (including its ability to be utilised for alternative modes of transport).
- Existing assets make a significant contribution towards delivering the positive externalities as valued by IPART. Arguably, for a like with like comparison, the value of the asset base (and hence the derived revenue requirement) should reflect the actual economic value (or opportunity cost) of the existing assets.

On the proposed ex-post review of the "prudency" of actual expenditure incurred over the regulatory period, Government would welcome further detail to better understand what this review would involve. In particular:

- It is assumed this relates only to capital and not all expenditure;
- Major project proposals for the CityRail network are a matter for Government policy decisions and, as part of that process, subject to rigorous cost benefit analyses and the Government's Gateway Review process; and

- A “prudency” test, such as that applied to the energy and water sectors where costs are fully recovered from users, may not be immediately applicable to rail. Any prudency test for rail capital expenditure would need to be considerate of benefits to the user and the broader community and be mindful that the benefits are unlikely to be fully realised in the short-term.

7. The revenue requirement

Generally, the rate of return on the capital element of the revenue requirement would be based on capital asset pricing using the appropriate pricing model and consistent with market evidence. The Government would welcome clarification from IPART as to whether the rate of return would be constant over the determination period or subject to price fluctuations.

IPART is seeking comment on short term patronage projections. RailCorp and the Transport Data Centre at the Ministry of Transport are currently undertaking further work to determine future CityRail patronage forecasts and expect to be able to provide this to IPART in October. It is important to note that 2.5% is not a forecast of patronage growth based on any quantitative demand analysis. It is the level of growth needed by CityRail to achieve State Plan targets under the preferred scenario.

The Government supports, in principle, the proposal that commercial revenue generated by RailCorp from non-passenger related activities, such as renting of airspace above stations, other commercial rents and advertising, would be accounted for as a reduction of the “net revenue requirement” that CityRail would need to recover from farebox and Government. It is not considered appropriate to have a shifting fare base to account for small fluctuations in commercial revenue. Instead, it is expected that, after the four year fare path is set, small fluctuations in commercial revenue would be covered by adjustments in Government funding, if necessary.

Commercial revenue should be measured after taking into account the costs, including capital costs, of earning this revenue. This is not clear from tables 6.7 and 6.8 of IPART’s Discussion Paper.

8. External benefits of CityRail services

Any calculation of externalities invariably includes an implicit degree of subjective judgement and, depending on methodologies employed and underpinning assumptions, the value of external benefits may vary significantly.

In this regard, the Government also notes that IPART’s preferred approach to determining the split between passenger and taxpayer contributions is to make a judgement after considering key factors, including:

- as robust an estimate as possible of the external benefits;
- the outcome of the CRA International “optimisation” approach; and

- a range of other factors, including affordability for passengers, impacts on patronage levels and Government policy (as well as factors the IPART Act requires IPART to consider).

In establishing a robust estimate of the externality benefits of CityRail's services, IPART may wish to consider whether the findings of the 2006 Eddington Transport Study, undertaken for the Government of the United Kingdom, is relevant for the assessment of the external or other benefits of CityRail services. This study examined the relationship between transport and the broader economy, with particular attention to transport and the productivity and other benefits of agglomerations (ie: the clustering of businesses, typically in urban areas or industrial locations).¹

Arguably, businesses locate in the Sydney CBD and other centres (such as North Sydney, Parramatta and Chatswood) because of the agglomeration advantages Eddington identifies. To the extent that centres like the Sydney CBD are supported by the mass transit services CityRail provides, this could be considered an additional externality.²

Similarly, it has been suggested³ that it may also be appropriate to consider the inclusion of value of other matters in evaluating transit systems, even if these benefits do not fit within the definition of externalities. This could include, for example, the cost of undertaking the same transport task by different means.

9. The share of CityRail's revenue requirement to be funded by passengers and taxpayers

As noted in section 8, IPART's preferred approach to determining the share of CityRail's revenue requirement to be funded by taxpayers and by passengers is making a judgement, based on all relevant factors. This includes, among other things, affordability for passengers, the impact on patronage levels and Government policies.

Given the inherent uncertainty in any assessment of the level of CityRail's externality benefits and the different possible approaches to the valuation of the ICB, this would seem likely to deliver a better outcome than relying solely on one measure.

In this regard, the Government notes that the CRA International optimisation study found that, while fares would be higher and Government subsidies lower under an "optimal" setting, a broad range of scenarios delivers a very nearly optimal result. This suggests that how CityRail's revenue requirements are

¹ The Eddington Transport Study; Main Report Volume 1 2006.

² Eddington noted the majority of productivity benefits from agglomeration are already captured in transport appraisal through the value placed on time savings. However, the existence of agglomeration economies means that the actions of each individual firm impact on the productivity of all other firms in the agglomeration; these productivity effects on others are additional to appraisal and can be significant. p26

³ Issues raised by Todd Litman, an academic at the Victoria Policy Institute, Canada, at an 18 February 2008 forum with RailCorp and other officers.

allocated between passengers and taxpayers can be undertaken in a number of different ways and still achieve a close to optimal outcome.

Consideration will also need to be given to impacts on patronage noting that the price demand elasticity in the Booz and Co study was constrained to fare changes of not more than 10%.

Any adverse impacts of fare changes should, ideally, be managed to avoid compromising the integrity of the economic regulatory framework. This may include delivery of transparent subsidies in accordance with stated Government policy and/or the implementation of transitional arrangements.

Any “gap” between the passenger and taxpayer share, as a result of a Government policy decision to deliver additional subsidies and/or during any appropriate transition period, should be met by Government.

Part 3. Structure and level of CityRail fares

10. Using peak and off-peak fares to help manage capacity constraints

Demand for public transport is predicted to increase, mirroring the growing metropolitan population. Issues like increasing petrol prices and greater environmental awareness are also contributing to shifting travel patterns. It is important that fares reflect current conditions and can adapt to future challenges.

As IPART notes, differential pricing of peak and off-peak tickets can be used as a tool to assist in demand management across the network. Pricing should aim to encourage travel outside both of the AM and PM peak period, with the objective of easing congestion in peak periods. “Smoothing” the peaks would provide both improved comfort and decreased journey times for passengers.

In March and April 2008, TNS Social Research undertook qualitative research for CityRail amongst a cross section of peak time travellers to gain insights into attitudes and behaviour regarding peak time travel. To change travel behaviour, those surveyed indicated that faster and more frequent trains, more parking and better facilities were some of the factors that would be need to be addressed. Lower fares were also highlighted, but it was noted the savings would need to be significant and with no added inconvenience like additional queuing time.⁴

Research undertaken in the United Kingdom has also found that changes in behaviour are more successful and revenue neutral if both the off-peak fare is reduced and the peak fare is increased.⁵

There are also a number of other factors that may influence customers to change their travel patterns generally, including:

⁴ Peak to Off Peak – Encouraging the Shift, March/April 2008 TNS Social Research for CityRail.

⁵ Whelan G and Johnson D, 'Modelling the impact of alternative fare structures on train overcrowding', *International Journal of Transport Management* 2 (2004) 51-58.

- Frequency of service & availability of seating;
- Connectivity with other modes;
- Availability of car parking;
- Workplace flexibility; and
- Safety (particularly for late evening off-peak services).

Even with the implementation of changes to the current pricing structure, in the short to medium term individuals may have a limited ability to shift the travel times of non-discretionary journeys. However, the appropriate pricing signals may influence the start and return times of some discretionary journeys.

Current arrangements provide no incentive for travellers purchasing off-peak fares to undertake return travel outside the PM peak period. However, placing restrictions on off-peak ticket holders travelling in the PM peak poses some implementation challenges.

RailCorp patronage and load data indicates that the current PM peak is extending beyond 6pm towards 6.45pm. Currently, only 44 of 304 stations are gated, meaning any introduction of time-limited return off-peak tickets will need to be accompanied by appropriate revenue protection measures and communication campaigns to boost compliance. Another option may be the implementation of single off-peak tickets to provide greater control on the timing of return travel.

However, Sydney's transport system already has a plethora of ticket products available. The introduction of any additional fare products would, therefore, need to achieve substantial benefits for commuters and Government.

11. Improving CityRail's distance-based fare structure

11.1 Cost reflectivity

The NSW Government notes IPART's advice that there is little consistency in the current rates passengers are charged for the distance travelled on the CityRail network and that this raises equity issues and may also be negatively impacting on the efficient use of the network.

The Government supports the implementation of a more transparent fare structure that has a stronger relationship with the cost of providing services, to improve efficiency and help inform future investment decisions. A flat flag fall plus a per kilometre charge that is not characterised by sharp "steps" would also bring additional transparency and simplicity to the pricing system.

The Government notes that IPART considers that an electronic ticketing system would readily support a distance-based pricing structure. Government has agreed in principle to test the market for such a system and has also determined to seek IPART's advice on the fare structure that should apply, for all modes, on the new eTicket integrated ticketing system.

However, a flat flag fall and static (flat) per kilometre charge is likely to result in increases, in some cases quite significant, for passengers travelling longer distances. This is especially if a 20% discount relative to the single fare is applied across the board for weekly tickets.

The Government notes IPART's preliminary view that, if additional subsidies are required, they are more appropriately delivered through concessions than through the fare structure. Further comments on this issue are set out in Section 12.

The Government also notes IPART's intention to undertake further work into whether the variable cost of services declines with distance and that IPART has flagged examining other ways in which the transparency and cost reflectivity of the fare structure could be improved, such as through applying a consistent, additional subsidy to each additional kilometre travelled.

11.2 Discount levels: weekly tickets

The discount provided on weekly tickets currently varies depending on the distance of journeys undertaken, with longer trips receiving considerable discounts relative to the prices of 10 single fares. Implementing a uniform base discount should be further investigated, but IPART is requested to give consideration to the impact on passengers at the outer margins of the network.

The Government notes that, if the "base" or single fare comprises a per kilometre charge that gradually reduces with distance, a flat discount structure is likely to have a less significant impact on passengers who currently rely on weekly tickets. At the same time, it would also improve transparency, equity and the relationship between fares paid and the cost of service provision. This is especially the case if variable costs decline, on average, over distance.

11.3 Discount levels: TravelPasses and other rail periodicals

If changes are made to the way in which single and weekly tickets are priced, products like TravelPasses and longer term periodicals may also need to be reviewed.

Discounting on the current range of products is highly variable – to in excess of 50%, compared with the price of single fares. For example, the range of annual bus/train/ferry TravelPasses offer a 30% discount relative to the purchase price of 52 weekly TravelPass products, meaning travellers are paying a price equivalent to approximately 40 weekly TravelPasses for a year's worth of travel.

Weekly TravelPasses in themselves offer substantial discounts for frequent multimodal travel, compared with single fares.

Long term rail periodicals ("FlexiPasses") are also deeply discounted, relative to single fares and weekly products.

FlexiPasses offer travel by train from 28 up to 365 consecutive days from the day of purchase between two specified stations. Longer periods offer greater discounts. For example, a 365 day FlexiPass from Artarmon to Wynyard costs

\$1,027. Purchasing a peak return ticket for a five day working week would cost \$30 a week for the same journey, or just over \$1,500 a year.

By purchasing a FlexiPass annual ticket, travellers are in effect paying for only 35 weeks at the full fare. Generally, however, it is individuals on higher incomes who are in a position to afford to pre-purchase these products, leaving those who can often least afford it purchasing the more relatively more expensive single trip tickets.

The Government considers the fare structure across the network should reward frequent users and encourage multi-modal travel, but also improve equity. The level of discount available to FlexiPass and TravelPass users beyond the standard commuter discount on a weekly pass, therefore, requires consideration.

12. Social impacts of fare changes

12.1 Capacity to pay

From 2000 to November 2007, CityRail fares increased 20.6%, compared with an average wage increase of 35.8%.⁶ This suggests that increases to CityRail fares have been modest; with the proportion of income spend on CityRail products actually decreasing for most passengers over this period.

However, reliance on an average wage increase when determining the level of fares could have disproportionate impacts on different user groups.

Further consideration will need to be given to the extent to which this average increase in wages is representative of the level of the wage outcomes experienced by different groups of CityRail passengers. For example, a breakdown of the Australian Bureau of Statistics' data shows that, across industry groups, wage increases over that period are between 19% and 48%.

The geographic spread of wage outcomes, occupation and residential patterns will impact on the extent to which people in different parts of metropolitan and outer metropolitan Sydney rely on CityRail services to travel to work.

Finally, analysis of the vulnerability of different groups in Sydney (and elsewhere in Australia) to mortgage and other inflationary pressures on costs generally (especially fuel costs), suggests that people in the fringe areas of the metropolitan areas and high growth corridors are most exposed.⁷

The Government would welcome IPART's consideration of these factors to ensure CityRail services remain affordable, particularly for those users facing the greatest income stress.

⁶ ABS data reference 6302.0 Average weekly earnings, Table 13A *Average weekly earnings, NSW (dollars)*.

⁷ Dodson, J and N Snipe. *Shocking the Suburbs: Urban Location, Housing Debt and Oil Vulnerability in the Australian City*. July 2006.

The Government also notes that changes to fares and fare structures have the capacity to influence patterns of growth and economic development in areas serviced by CityRail, especially given the long distances some workers travel, the current low levels of unemployment and the existing pressures on inflation. A better understanding of the short, medium and term impacts of the kind of changes IPART is considering recommending to Government would be welcome.

12.2 Delivering subsidies through concessions

NSW has the most generous concessions scheme in Australia, spending around \$800 million a year to ensure that public transport users including students and young people, apprentices and trainees, veterans with disabilities and pensioners and seniors can access concessional fares.

CityRail estimates that one in three of its customers is a student, pensioner or unemployed person and is eligible for a discounted fare.

As noted in section 11.2, the Government notes that IPART considers that targeting subsidies through the delivery of transport concessions may have a less distorting effect than through the fare structure and associated discounting regime.

This would appear to raise practical issues, however, in terms of administration and delivery, including how the Government would assess eligibility. The Government would welcome IPART's advice on options for delivering such a system.