A Future for Regional Passenger Trains in New South Wales

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BACKGROUND TO THE STUDY

The Local Government Association of New South Wales and the Shires Association of New South Wales formed a Local Government Rail Task Force in November 2003. The Associations asked the Task Force to investigate the recommendations of the New South Wales Government’s Inquiry into Sustainable Public Transport in New South Wales (the Parry Report) relating to regional passenger rail services. The Task Force asked the Centre for Rural Social Research to explore the broader social, environmental and economic aspects of rail services. The Centre and the Task Force have been working together investigating the circumstances of rail transport and exploring pathways towards a sustainable passenger rail system to serve the needs of people in Greater Sydney as well as the regions. This summary report looks at regional travel needs, surveys some recent history of regional rail services, analyses public attitudes to train travel and explores opportunities and challenges for the future.

The research project collected data in a series of focus groups and interviews in regional areas and a telephone survey of 303 adults conducted in Wagga Wagga and Lismore. The survey explored attitudes to train travel and related issues. The report also uses information collected from State Rail Authority and RailCorp annual reports and published timetables, as well as the railway press.

A technical appendix, which provides detailed information on methodology and further analysis of findings with supporting argument, is available from November 2004 free of charge at the Centre for Rural Social Research website: http://www.csu.edu.au/crsr.

KEY FINDINGS

There are strong economic, social and environmental reasons for developing regional passenger rail.

- some anomalies appear in service levels and timetabling when we look at the history of contraction/expansion of services from a regional perspective
- there is evidence that the apparent long term decline of regional rail patronage is not inexorable and can be turned around by increasing quality of service
- New South Wales is being left behind in passenger train development, missing possible opportunities for regional economic and social development
- there are opportunities for the development of passenger trains emerging in New South Wales from changes aimed more at the freight rail system and in public attitudes to sustainable transport
- new approaches to sustainable transport offer opportunities to develop rather than close services
WHY TRAINS?

There are sound economic, environmental and social reasons why passenger trains should be retained and developed as a regional travel option.

- Environmental reasons point to reduced pollution and resource consumption, as well as avoiding ecologically damaging road construction.
- While pollution and congestion are the usual reasons given for developing urban public transport, the same principles apply in regional areas, and car travel from regional areas to cities contributes to city environmental problems (and the costs of road development and maintenance).
- Some rapidly growing regional areas, notably in New South Wales the Northern Rivers but also the Southern Highlands and the South Coast, have relatively little, inadequate or otherwise deficient public transport but are rapidly becoming dispersed cities.
- Fast train services have deflected growth away from large cities in other countries and helped governments avoid the additional cost of very expensive roads.
- Social reasons are particularly relevant to CountryLink due to its extensive offerings of concession fares and its attention to the special needs of elderly, disabled and other travellers. It has become a particularly important provider of social services – enabling many people to maintain independent contact with family and friends and preventing social isolation.
- The governments of Victoria, Queensland and Western Australia have recognised the benefits of regional passenger rail improvements. Victoria’s Premier Bracks has predicted additional population growth of 20,000 and the creation of 4,000 new jobs in the areas to be served by fast passenger trains enabled by infrastructure improvement. The Queensland Government has spent around $2 billion on upgrading to accelerate passenger and freight trains since the early 1980s. The Western Australian Government has just commenced an accelerated and upgraded service between Perth and Kalgoorlie. These states contrast with New South Wales where relatively little has been done but the needs are arguably greater.

The notion that all people have freedom of choice with respect to travel modes is incorrect. Other, non-rail, modes of travel can be problematic, particularly long distance coach travel, for the elderly and others including families.

As one focus group participant explained

‘...about the older folk on the trains. I’ve been on the train a lot ... and I’m aware of the care that the older folks and people with disabilities are given. And as we’re getting older we can identify with some of those problems ... and if you don’t mind my mentioning a delicate subject - I know there are some males, but a lot of women are incontinent ...and coach travel as against train travel, um, the train is more convenient and toilets on coaches for people who are unsteady on their feet are downright dangerous.’

Ability to obtain food on-board a train and walk around were frequently mentioned.

From the perspective of carers

‘You can put your elderly relative on the train, have them met at the other end and know that they’ll be cared for.’

Parents made similar comments with respect to their children travelling, indicating problems associated with other forms of travel particularly coaches.

Some people have become dependent on train services. One person with a mild disability described the trip she did regularly to visit family. When asked what she did now that she had to travel part way on a coach, she replied: ‘I stay here’.

Many people have very few travel options, or effectively none at all, without trains.

A very large majority of telephone interview respondents agreed that the elderly and others who might use concessions should not have to pay the full cost of their travel (Chart 1). Note that only 8 per cent of those aged under 40 disagreed.

People from more remote inland areas suffer additional
problems because distance adds to and complicates their travel needs. Their long-distance travel can include trips to regional centres, as well as travel to the Sydney metropolitan area via a regional centre. Problems including unreliability and scheduling issues can be more significant to remote area dwellers than to others.

- Economic reasons for passenger trains relate to their continuing popularity as a mode of long distance commuting, recreational/family travel and tourism where fast and reliable services are provided, or appropriate tourist travel experiences developed.
- Focus group participants with business interests raised problems attending important business meetings in Sydney due to dependence on expensive air travel, which is sometimes prohibited by fog, or having to drive long distances in a single day, or having to bear the cost of overnight accommodation.
- The economics of public transport is taking into account the costs of not having adequate services – costs including health expenditure arising from motor accidents and pollution as well as the costs of road construction and maintenance.
A CHANGING NETWORK

Until the 1970s, passenger train services had remained relatively unchanged by the enormous increase in motor transport since World War II.

Map 1: Stations served by passenger trains, 1969
Source: Public timetable

The mid-1970s saw the closure of many services and the introduction of coach services to replace branch line trains.

Map 2: Stations served by passenger trains, 1977
Source: Public timetable

The system was in poor condition by the late 1970s. Much of the rolling stock used was very old, with the daylight express trains composed of 1940s and 50s rolling stock, and the overnight mail trains using even older carriages. By 1987, all branch line passenger trains had been replaced by coaches. The XPTs, introduced in 1982, provided many of the main line services. Maps 3 and 4 compare the frequencies of train services in 1987 and 2004 against 1986 and 2001 population census data for statistical divisions. By 2004, all locomotive-hauled trains had been replaced by either XPTs or ‘Explorer’ railcars.
Map 3: Service frequency (return to Sydney per week) and population, 1987
Source: 1987 Public timetables and 1986 Commonwealth Census
Note that the ID

to show specific service change issues of regional interest to be discussed below. Stations at which service frequency changes are shown.

With exceptions near Sydney where services have increased, frequencies were lower or substantially unchanged in 2004 than in 1987 (although Griffith regained a once-per-week service after having lost all services prior to 1987).

- The far north coast (Northern Rivers) has lost all train services to Murwillumbah despite strong population growth.
- Some inland local areas have experienced significant growth. Mudgee and Cowra, for example, have useable lines but no train services. They had populations of 17,682 and 12,462 respectively at the 2001 Census and growth from 1991 to 2001 of 8.7% and 4.6%. Other inland areas have had rapid growth, such as Griffith at 15.9% between 1991 and 2001.
- In the rapidly growing areas south of Sydney, Moss Vale’s services had expanded from 69 to 127 but Nowra services only grew from 77 to 88 and Goulburn from 53 to 55.
- The additional services south of Sydney were all indirect, requiring a change of trains at either Campbelltown for Southern Highlands passengers, or Kiama, Dapto or Wollongong for South Coast passengers (Map 5).
Direct services from Moss Vale had fallen from 64 in 1987 to 46 in 2004, Goulburn from 53 to 36 and Nowra from 77 to 0. South Coast residents from Kiama north have benefited from the introduction of electric trains, but those further south including those using the long-standing coach services (not shown on the maps) from south of Nowra, have to make additional changes of trains.

Journey times from the Southern Highlands can be similar now to their 1987 equivalents, but they rely on tight connections at Campbelltown. As the proportion of indirect services has increased, gains made by the Endeavour rail cars, which replaced many locomotive-hauled trains, and use of the faster route via East Hills have been lost.

In contrast, on the electrified line to the Blue Mountains (as also to Newcastle), virtually all services are direct. However Katoomba’s services had also declined: from 159 to 136.

Plate 3: The Blue Mountains is served by much larger trains than those of the Southern Highlands (see Plate 10). A double-deck electric train stands at Lithgow.
WHAT HAPPENED TO THE PASSENGERS?

In short, many of them bought motor cars and have chosen to use them for regional travel. However, the view that trains are suffering a relentless decline in patronage may be misleading because:

- significant growth in patronage has occurred on occasions
  in 1984 patronage on XPT services was rising rapidly despite premium fares; in 1985 a timetable change brought a 200% increase on a north coast XPT service; patronage levels have shown recoveries during the mid-1990s and more recently
- the Queensland tilt train competed effectively with air after it substantially reduced travel time, and the Victorian Government is anticipating attracting motorists to its regional fast train project which is presently under development. (Tilt trains have mechanisms to tilt the carriages so that passenger comfort is maintained as curves are negotiated faster. They have been used in Queensland since 1998. They had attracted 1 million passengers on the Brisbane-Rockhampton service by 2002. They are used on many railway systems overseas to accelerate services on existing track.)
- there may be explanations for fluctuating patronage other than competition from airlines, coaches and the motor car.

Explanations for declining patronage offered in Annual Reports refer to airline and coach competition and fluctuations in tourism and the economy in general. However,

- competition from coaches had a large initial impact in some situations but the effects were not always sustained
- air fare discounting seems likely to have affected interstate travel but regional air fares have generally not been discounted substantially relative to rail
- rapid declines in patronage, consisting predominantly of train journeys, in the early 1990s and early 2000s both followed periods of poor timekeeping, suggesting that people changed their travel habits following bad experiences (Chart 2).

The telephone survey adds weight to this interpretation, with 39 per cent of respondents indicating that they would use trains more often if they ran on time (Chart 3). Many respondents appear uninterested in using trains, but as rail’s market share of all non-urban travel is now so low (around 3 per cent) that 39 per cent of people appearing to consider regional rail travel is a very large proportion.
Train journey times have been increasing relative to road due to improvements in roads without parallel improvement in rail infrastructure. In addition:

- revisions to XPT timetables have increased journey times.

Chart 4 illustrates what may be the worst example: a deterioration of 12% over the fastest schedule making the XPT slower than the daylight coach service from Wagga Wagga to Sydney.

[Image: Chart 4: Albury to Sydney XPT journey time for day services]

The telephone survey conducted for this project suggests that train journey times discourage some patronage (Chart 5) along with convenience of services. Forty four per cent of the sample agreed that the main reason they don’t travel by train is journey time, with men more likely to agree than women.

[Image: Chart 5: The main reason I don’t travel by train is that it takes too long]

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Plate 4: XPTs meet at Harefield. The July 2004 timetable puts the ‘crossing’ place for the daylight Sydney-Melbourne and Melbourne-Sydney services on the single track area of the Southern Line south of Junee. Previously, the trains had crossed on the double track at Harefield for the Sydney-Melbourne train on the left to pass. This procedure has added 15 minutes to the journey time for the Sydney-bound train.

- Timetables have not always been appropriate to the needs of regional people.
- Positive changes can bring increases in patronage, such as that mentioned above with respect to North Coast XPT services.
- People give day return travel to Sydney a high priority, but timetabling has not always reflected this.
WHAT HAS PREVENTED IMPROVEMENT (AND HENCE EXPANSION OF PATRONAGE)?

In short, insufficient timely investment in either equipment or infrastructure.

- While achieving very significant productivity gains, CountryLink has had difficulty maintaining a reliable operation with attractive timetables.
- Since the construction of the Explorer trains and some new XPTs in the early 1990s, CountryLink has not developed its fleet, some of which is now approaching the end of its life (Chart 6).

This lack of investment contrasts with Queensland, Victoria and Western Australia where governments have developed track and equipment to take advantage of late 20th Century technologies (in contrast to the XPT which is basically early 1970s technology).

- New South Wales considered a tilt train solution in 1995 but decided not to buy it, largely because the track infrastructure did not permit the train to take sufficient advantage of its tilting system. New South Wales may have been distracted by proposals to build a Very Fast Train system, initially between Sydney and Melbourne and later between Sydney and Canberra, but such ideas were terminated by the Commonwealth Government. Both these proposals were aimed at overcoming the basic inadequacy of the railway infrastructure in New South Wales: excessive curvature in the track.

Plate 5: A Melbourne-bound XPT accelerates out of a curve near Binalong. The 'speedboard' beside the track to the left of the train indicates the speed of XPTs (the lower, white sign) and other trains (the upper, orange sign). XPTs have a considerable speed advantage over other trains where the track is straight, but where the track curves, the advantage is smaller. Tilt trains are better able to maintain a speed advantage over conventional trains including XPTs, but where the track remains curved, their advantage is also lessened. Straightening the track is essential to increasing train speeds.
Plate 6: A ‘Broken Hill Outback Explorer’ negotiates a sharp curve near Sodwalls (between Lithgow and Bathurst). The rectangle indicates a bridge which was part of the Main Western Line before much of it, like the Main Southern and parts of the Main Northern Line, had curves added to ease gradients against steam locomotives. This bending of the tracks progressed through the first half of the twentieth century. Some commentators have proposed that the original alignment would provide for faster journeys by modern trains. Several plans have been developed to straighten the main routes, particularly on the Main Southern but also part of the Northern line between Sydney and Newcastle. In what could be a breakthrough, the Federal Government has recently provided funding to straighten parts of the Sydney-Brisbane line, the most congested of all the interstate routes.

Plate 7: The tracks are not the only outmoded infrastructure. A Canberra-bound Explorer stands in the platform at Tarago, waiting for the driver and guard to conduct a ‘safeworking’ procedure – changing ‘the staff’ and signals – which is basically unchanged since the nineteenth century. The semaphore signal, visible in the distance between the station verandah and the train, is indicated by the rectangle. The driver is about to change the signal from clear to danger using a lever in the station. The procedure takes several minutes. Commonwealth Government funding has been made available to replace such systems on the Sydney-Melbourne line, but the Canberra line is, ironically, considered to be a regional railway. Similar procedures near the northern end of the Sydney to Brisbane line should soon also be replaced under Commonwealth funding by a remotely controlled system which does not require trains to stop.
Australia’s rail industry is optimistic.

- The Commonwealth Government’s AusLink programme has recognised the necessity for improved performance from the rail industry by contributing to infrastructure renewal, which is needed in New South Wales more than in any other State.
- The Australian Rail Track Corporation (ARTC) now either owns or controls all the interstate standard gauge system outside the Sydney electrified area, plus the Hunter Valley lines. Although this removes rail infrastructure from the control of the States as an element of regional and employment policy, it should enable the development of more efficient, singular operating systems.

Plate 8: A Melbourne-bound XPT crosses the Murrumbidgee River at 20 kms per hour. This 120 year old bridge at Wagga Wagga should be replaced by 2007 under Commonwealth funding which will be used to take 3 hours of the Sydney-Melbourne freight schedule, without any curve straightening.

The AusLink programme and the ARTC promise to stimulate growth in rail services. However, passenger services will be competing with freight for access to the renovated system. Although operating protocols are likely to give formal priority to the passage of passenger trains, it is reasonable to ask

- will investment in and the operation and maintenance of the interstate main lines continue to facilitate regional passenger services?
- what will be the long term status of lines which are very important to passenger operations but are not part of the ARTC leased network, being ‘regional’ rather than ‘interstate’?

The Main Western Line between Lithgow and Parkes/Dubbo and the Goulburn to Canberra line are examples which will remain dependent on State Government, although the AusLink policy paper indicates willingness to consider assisting development of regional lines.
The rail industry augmented its lobby organisation, the Australasian Railway Association (ARA) with a new Canberra office in 2003. The ARA has called for further rationalisation of ‘under-utilised’ long distance passenger train services, but does indicate an interest in passenger services more broadly and is working towards infrastructure improvement which would assist the development of passenger services.

The governance of our railway system has changed drastically with the State Governments, other than Queensland, relinquishing much control to private operators and the ARTC.

- This change prompts consideration of interstate partnerships to provide regional transportation services across State borders in areas like
  - Northern Rivers-Gold Coast
  - Murray region
  - north west New South Wales – south west Queensland

The ACT Government has taken an interest in scheduling and other issues related to the existing line to Canberra, as well as promoting the unsuccessful Very Fast Train proposals.

‘Short Lines’
Rail deregulation in North America allowed the large freight railway corporations to sell their branch line systems from the late 1980s. While many were taken up by large companies, many were purchased and are still operated by small, often family, businesses. This model has been proposed as a means of saving regional branch lines in Australia.
However, it has recently appeared to be in trouble in the United States due to difficulty funding rolling stock upgrades. Small regional passenger operations have been undertaken in Australia, buying access to the track rather than buying the track, and found at least short term success. However, two have recently withdrawn from providing regular services in Victoria.

While optimistic with regard to interstate freight, the rail industry continues to observe that passenger service growth will continue to depend on attracting people who would otherwise travel by car.

This may be achieved by accelerating and otherwise improving the quality of services. It may also be enhanced by ‘demand management’.

Demand management

- is a means of prompting people to consider travel modes alternative to the private car
- consists of ‘soft’ programmes like information dissemination and environmental consciousness raising, not just ‘hard’ programmes like motorway and parking tolls.
- is advocated and applied extensively in urban situations, particularly in Europe
- can in principle be applied to regional travel

The telephone survey conducted for this project supports the view that soft demand management could be applied to regional travel.

Regional people are known to be more frequent users of car travel, but this may be as much out of necessity as choice. The telephone survey attempted to measure attitudes towards use of motor cars. One question asked sought an indication of willingness to change travel habits (Chart 7).

![Chart 7: I feel that I should use my car less often to reduce congestion...](chart)

\[n = 303\]

A matter of attitude?

It seems that public attitudes may be more accepting of progress towards sustainable transport than governments appreciate, and may be more accepting of change than governments themselves.
Suggestions

Some indications for ways forward became apparent in the course of the research, in addition to many currently public, well-developed proposals for infrastructure and equipment renewal.

Economic

Full triple bottom line accounting should be applied to ensure that all costs and benefits are considered in policy making and feasibility studies. Such costs include those arising from health and social issues as well as economic development and environmental degradation.

Possibilities for partnerships and sponsorship with other transport industries, including the automotive industry, should be explored.

Partnerships with heritage and other operators should also be considered.

Social

Opportunities to promote change in the culture of travel should be considered – Australia has a good record of change in other aspects of environmental behaviour.

The notion of ‘Community Service Obligation’ rests uneasily with the now very dominant concept of the railway as a business as it denigrates the social value of rail service provision and may be hindering consideration of new sustainable approaches to transport problems.

Political

The concept of ‘regional railway’ provides an opportunity to develop rail systems independently of the State boundaries and opens doors to regional-based transport organisations.

Engineering

The range of options being presented for infrastructure upgrade should be examined with a view to providing opportunities for passenger services, including tilt trains.