

PUTTING THE PUBLIC BACK INTO PUBLIC TRANSPORT

Paper presented to the PUBLIC TRANSPORT IN ADELAIDE; PROBLEMS AND VISIONS forum, 14th August 1999 by Max Michell, Chairman of community rail lobby group RAIL 2000, and a rail operations and planning consultant trading as SAMROM Pty Ltd.

My interest in Adelaide public transport is primarily in the rail network. The 120 km four line suburban service is the broad gauge remnant of the former South Australian Railway network that once served most settled parts of the state. It is also the only railway over which the state now has governance.

During my time in Melbourne I travelled an estimated 300,000 kilometres commuting to and from work, added to which I have covered a further 700,000 kilometres on non commuting rail journeys. So I think I can claim some authority for 'What I intend to present.

The role of public transport has declined in the last 50 years as a result of rapid city growth, severe under investment, poor governance, mismanaged planning of city development, and uncontrolled growth of private motoring. In most Australian capital cities rail performs a major part of the public transport task, and in fact accounts in aggregate for up to 60% of public transport passenger kms. In Adelaide rail is a minor player with around 15% of public transport passenger journeys.

Which leads me to the major problem facing suburban rail in Adelaide - SURVIVAL. As simple as that !. Unless something is done to revive rail in Adelaide the existing network will disappear within the foreseeable future. To .present this case, and focus on the thinking and action required to reverse this situation, I intend to present a case study around the worst performing of the Adelaide rail lines - the line to Belair. But before getting to that lets take a bit of time to check out some data about suburban rail in Australia.

Of all the Australian capitals only Hobart, which lost all its passenger trains in 1975, and Darwin, which lost its only railway about the same time, do not have suburban rail services. Of the rest Sydney is by far the biggest with 267 million rail journeys per year, followed by Melbourne on 113 million, Brisbane on 41.5 million, Perth on 28.3 million and lastly Adelaide on a mere 8 million.

Perhaps more usefully Sydney people on average travel by train 66 times per year, Melbourne 38, Brisbane 32, Perth 24 and Adelaide 8. How relevant is rail when the average usage is one third of the next highest city ?.

Wellington NZ has a population about one third of Adelaide yet manages 9 million rail journeys a year, a usage rate similar to Perth's. Even more spectacularly the Perth Northern Suburbs line which was only built 8 years ago has twice the number of passengers as the whole Adelaide network.

Back in the sixties Adelaide and Perth both had about 10 million passengers per year. Now look at the numbers. Similarly Brisbane was moving about 15 million per year at that time.

Typical off peak weekday headways are 15 to 20 minutes in all but Brisbane and Adelaide, and Brisbane is planning 20 minute frequencies when new trains are delivered. Adelaide adheres to a 30 minute headway, and even has the unique distinction of having several stations with a worse peak hour frequency than their off peak frequency.

The conclusion has to be that over a long period of time the rail network in Adelaide has been allowed to deteriorate and decline to the point where it provides only a marginal amenity to the city.

Perhaps a few local numbers might also be in order to place the rail system in perspective. By fortuitous circumstance, and some reading between the lines, I have been able to construct some numbers which will be adequate for illustrative purposes.

Of the four rail routes the busiest is the Noarlunga group with 36% of the patronage, followed by Gawler on 32%, the Outer Harbor/Grange group with 23% and a distant last the Belair line with just 9%.

The five busiest stations outside Adelaide generate 25% of the journeys while the 17 busiest stations generate over half the journeys. In other words 20% of the stations do 50% of the business.

The Adelaide rail system has a fleet of 100 diesel rail cars, all air-conditioned, of which between 80 and 90 are in use at peak periods. In the off peak the number running is about 35 cars on weekdays and half that number at night and on weekends. In fact over the typical operating period of 18 hours per day there is less than the equivalent of one quarter of the fleet in full time operation. Three quarters of the fleet (\$200 million of capital equipment) is statistically perpetually idle.

The Belair line wends it's way 21 km into the hills, the only suburban line to do so, but by a rather indirect route in order to maintain an acceptable gradient. In fact the alignment is exactly where it was laid down in 1887 apart from the 'new' tunnel at Sleeps Hill which bypassed two bridges which were beyond redemption. The stations are virtually where they were placed last century, making no allowance for contemporary needs of developments. The only concession to modern needs has been the closure of the three stations in 1995 that had patronage figures so low that a single taxi could have handled the number of passengers offering for each train.

On the Belair line just three stations generate 55% of the journeys, these being Blackwood, Coromandel and Eden Hills. Four downhill stations between Lynton and Unley Park generate 25% of passengers, almost half of which come from Mitcham, while three upper section stations from Glenalta to Belair produce only 14%. The remaining 6% are from stations Goodwood to Mile End, which have shared services with Noarlunga line trains. If all passengers were equally shared across all weekday trains there would be an average of about 50 people per train, about half a single railcar, or just over one bus per service.

So when we look at the big picture we see that the typical Australian city has about one third the public transport usage of a European city, Adelaide has the lowest public transport usage in Australia, rail in Adelaide has by far the lowest share of public transport usage in this country, the Belair line produces less than 10% of the rail passengers in Adelaide, with a mere three stations producing 55% of the lines business. Single car trains suffice for most services, and when it get to that situation it is fairly obvious that the next possible service reduction is no railcars.' no trains at all! So you will appreciate why I say the real issue is SURVIVAL.

The only justification for public transport is if people use it, the amenity gained by the populace at large from the public transport network is measured by their use of the system. All the touchy feely reasons in the world matter little if the public choose en masse not to use the services. It is all a matter of bums on seats when it comes down to the political bottom line. If perhaps 2% of the population in the Belair line catchment actually use the train do you think the politicians are going to be greatly concerned ?

There are a number of significant issues for rail that need attention now if the rail system is to have any chance, and most of these are issues that the government will have to resolve. The government will only be inclined to do so if they are convinced that the voters want them to do so (politicians in this country seem to have decided, en masse, that what is good for them is more important than what is good for the state/country - think about it !). So the voters had better start convincing their elected representatives.

The most immediate issue is the soon to be introduced GST. Adelaide will get a small concession from the diesel excise reduction, something that rail in other capitals will not, but will suffer additional cost imposts from the addition of a GST on most of their goods and service acquisitions. Public transport fares will be subject to GST, and with underlying cost changes fares will have to rise by at least 5% just to maintain the status quo. Private cars will decrease in price at the same time by up to 7% which will further tilt the playing field. In a city like Sydney where road gridlock is becoming a fact of life this may not matter, but in Adelaide where motorists are being given free kicks all over the place it is a very threatening issue.

The combined impact on public transport costs and passenger numbers arising from the GST may well simply expedite draconian action by government obsessed with management (an oxymoron) by cost cutting.

The second issue that is that of planning. We have public transport plans, road (in reality private transport) plans, land planning, environmental plans, water plans and so on. But do these planning processes ever relate to each other and do they ever deal with the greater good rather than their own particular parochial patch. I would suggest not.

Two examples. Adelaide has limited water, and in fact the lucky ones get to drink the bottom of the Murray River during summer. So one way or another Adelaide is not a place able to sustain population growth. If there cannot be population growth why for goodness sake are places such as Seaford allowed to develop, kilometres beyond existing services, for which the provision of water, electricity, gas, roads and public transport services becomes an additional cost to us all. There are no more people in Adelaide but the space they occupy is expanding and dissipating all the time. And everyone in the state, and to a lesser extent the nation, is paying for the lack of planning coordination and management by government. The second example. In 1980 a major rail freight yard was built at Dry Creek North (just beyond Wakefield Road) in an area some what flood prone and totally unpopulated.

It is also in one of the three major industrial corridors of Adelaide, normally a good place for a freight yard. Now it appears housing development is planned (do they really mean planned ?) adjacent to the yard, and demands are being made that will force rail to forgo its existence there. Why anyone would want to live in one of the most blighted areas of Adelaide is beyond comprehension, but even worse why would a government even contemplate yet another unnecessary housing estate at the expense of a major employment industry that serves many other major employment industries in the area?

Are we trying to create housing for the unemployed, or do we have sufficient housing and/or land for housing and need to concentrate on employment of the people who one way or another already have houses. Think about it ! Coordination of planning in this state is an absolute essential for reasons that extend way beyond the public transport issue, but are fundamental to public transport.

The third major issue is the of the transport level playing field. The fact is that there is no level playing field, and as a result there are severe distortions appearing in the transport structure in this country. In terms of urban transport there are two issues.' that of private versus public, and within public transport the issue of equitable treatment of the different modes.

In the first situation it would be reasonable to ask where is the income that offsets the several hundred million of our dollars that have been lavished on the one way freeway south of Darlington ? There is no direct charge raised, and in fact the biggest beneficiary of the state expenditure is the Federal government through increases private car usage generating increased fuel taxes and excise.

As an example of the second issue consider for a moment the 1994 State Transport Authority annual report. At least \$10.5 million is identifiable as track maintenance costs for the rail system, but nothing is shown for road usage by buses. Detailed analysis would almost certainly indicate that the disparity is even wider in both capital and operating costs. Poor decision making is the inevitable outcome of the internal accounting distortions in the system.

The solution to this conundrum lies in placing responsibility for road and track for all metropolitan transport (public and private) in the hands of a single authority with a clear mission that relates to the greater good for all. This would then have road and rail track under one umbrella, with a brief that included equitable charging for use of the 'track' taking due consideration of the intangible costs and benefits that arise from the various users of the different pieces of track. A radical proposal perhaps, but there is no reason why Adelaide should not be a leader rather than a follower in developing innovative solutions to difficult situations. This concept would also provide the basis for a service quality "privatisation" of the rail operation.

The other major issues I would identify are the twin issues of costs and revenues, but in a slightly different format. Railway vehicles are very expensive items. For instance the 10 railcars required for the Belair line (8 operating at peak plus 2 spare) cost about \$22 million new, with a capacity of about 1000 seats. For the same money 60 buses with 2700 seats could be acquired. So to make the most of investment in rail vehicles it is essential to get high utilisation, to maximise seat kilometres produced by each vehicle. Existing T.A. utilisation is poor with barely 25% of the fleet in the equivalent of full time operation, a situation exacerbated by undue attention to car kilometres rather than fleet utilisation. From an alternative perspective each full time T.A. railcar is effectively costing around \$9 million, a prohibitive price.

The solution here can only come from better balance of services in peak and non peak times, with more frequent use outside peak periods coupled with close management of peak services to ensure there is no wastage of capacity. The last few peak hour passengers on each line, for whom seating is nominally provided, are currently costing the taxpayer a fortune.

Revenue can only be effectively enhanced by increased passenger numbers. Key service factors are predictability frequency, comfort, accessibility, connectivity' and safety of the services, and these are the issues to which the public transport users will respond. A related issue must be the willingness of public transport management (and their shareholder government) to adapt to changing needs.

A powerful external impetus to improved usage can come from coordinated planning with appropriate regulatory and financial incentives to make best use of existing infrastructure (including existing water, gas, and electricity grids as well as roads and public transport) rather than head for "quick buck" greenfields sites. Sensible provision and pricing of parking, control of road traffic at key nodal locations, and access to public transport at major traffic Generators are be part of this process.

Of these revenue enhancing strategies only the first few can be managed by the public transport operator; the rest are more in the domain of government at various levels. Frequency is self evident, but in Adelaide it is a significant issue. Alone among all the capitals Adelaide has had the deserved reputation for poor frequencies on all its public transport, not just rail. Accessibility is all to do with timetables, fare structures, the ability to easily acquire tickets and easy direct access routes to platforms more than it is to do with the disabled. Connectivity is another significant factor in public acceptance of public transport. In Adelaide we have the absurd example of the three major public transport routes to the city all ending up blocks from each other. To make matters worse the typical traveller arriving in the city on the tram has to negotiate three sets of traffic lights before they, have any shelter from the elements.

Adaptation of services to meet changing needs (or even to meet needs) is fundamental to maintaining the relevance of public transport. People's expectations rise, centres of attraction change, populations age, and work itself changes all of which requires the public transport system to adapt. An example is the long running proposal to convert the Port line to light rail with possible extensions to Football Park and West Lakes. This proposed conversion would seem to have several benefits; extending the Glenelg tram to North Terrace, linking two and reconnecting one major traffic nodes to rail, renewal of the tram (light rail) fleet with modern high performance vehicles and access for both routes to the city centre. And what are the downsides?. Perhaps slower times to Port Adelaide (but more stopping locations?), smaller 'trains' (but higher frequency ?) and possibly some route changes. Despite the apparent advantages, and the commitment indicated by T.A's laying of dual gauge concrete sleepers there has been no public debate on the issue.

I suspect the reason comes from a an obsession with management by cost cutting, combined with a seizure of government initiative arising from misreading past system change protests.

If some of the above concepts were to be applied to the Belair line, which you will remember is probably the most marginal suburban rail line in the country, what would we get?

First lets look at the future growth opportunities of traffic generators. Stations on the Adelaide plain (as far as Lynton) have little undeveloped land near them and are constrained by hills face development restrictions, so little catchment growth is possible. The next three stations, Eden Hills, Coromandel and Blackwood, are already the major traffic generators on the line, but they are also in an area that has the only prospect for catchment growth with the Craighburn development. Beyond Blackwood land is severely constrained by topography and to a lesser extent the National Park, so expansion of the catchment there is unlikely.

In aggregate there are some catchment (market size) opportunities in the Eden Hills - Blackwood area but not much elsewhere on the line. Planned linkage with existing or yet to be built major commercial centres might offer marginal prospects. Other opportunities could come from improving tourist numbers on the line; for the train ride through quite spectacular scenery, for the Parks at Coromandel and Belair and for various walking tracks from and between various stations.

The first strategy to improve the patronage should be at virtually no cost" marketing the tourist potential to local and out of town tourists, and trying to improve the use by locals for commuter trips by the same means. Small scale improvements to the car park at Coromandel in particular would be worthwhile as would improved pedestrian access and signage between Blackwood station and the nearby shopping centre. A tram stop at Goodwood station, preferably above the platforms, would also be a good move for coordination (connectivity), as would cross platform connections between Noarlunga and Belair line trains at the same place (which would require stopping daytime Noarlunga line trains there).

Properly presented to the populace these measures should produce some measurable and enduring response in passenger numbers. A larger scale improvement, with a more dramatic impact on passenger numbers, would be a new station at Shepherds Hill Loop, just off Shepherds Hill Rd., where there is almost unlimited space for a car park.

A major improvement that should be applied to all Adelaide rail lines would be to provide a 15 minute off peak frequency rather than the 30 minute now provided. Contemporary travellers are intolerant of long waits, with lack of frequency being the single most aggravating issue for potential users. Railcars are freely available during the day, numbers of crew are on inter-peak "standby", and car Kilometres would increase less than 50% for 100% improvement in frequency. In the longer term the future for the Belair line has to be as a light rail line with some interesting diversions possible to greatly improve the lines usefulness for prospective users, including a 'city loop' using the Glenelg - Port Adelaide city link.

Undue attention paid to trying to resurrect three moribund stations on the Belair line has not only distracted the public transport lobby from the far more important issue of rail survival, but has also resulted in the government running straight to the sand pit and planting its collective head firmly in it. The 'save the stations' campaign has been futile and even worse has led to virtual abandonment by government of responsible and innovative governance that might have turned the fortunes of the Adelaide suburban rail system.

It is not too late, but if recent trends in usage are not reversed the issue of survival will become all too real.

Putting the public back into public transport is what it ultimately is all about.