Strategic Planning and Public Transport - A Case Study

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Abstract:

This paper outlines the role of the State Transport Authority of South Australia in establishing a 'vision' for the provision for public transport in Adelaide over the last few years and in changing the way that it goes about meeting the transport needs identified by this 'vision'

The environment that the STA was facing prior to the commencement of its Strategic change process is described along with the initiatives implemented to halt the decline in public transport usage and to provide more efficient public transport services. The paper includes a brief overview of the consultation mechanisms established to obtain better communication with public transport users, the market research undertaken to determine usage patterns ad need areas, the restructuring of service provision by the STA and the union negotiations undertaken to improve efficiency and flexibility.

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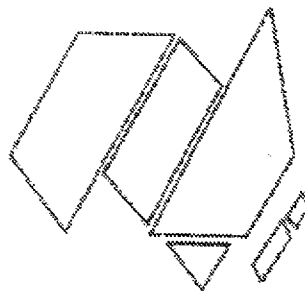
Introduction

The State Transport Authority of South Australia (STA) has been the leader, not follower, in changing the direction of public transport in Adelaide. This role was not forced upon the STA, it is one that the organisation itself determined was necessary to ensure that Adelaide will continue to have a very good public transport system. A role that the environmental changes that have been causing a deterioration in public transport's competitive position in relation to the private motor vehicle.

How then did the STA become involved in the development of a 'vision' for public transport in Adelaide, a vision that incorporated more than just the provision of standard route services.

Background

In order to describe how the STA played this role, it is first necessary to provide some background information on the organisation.

The STA, the principle provider of public transport in Adelaide, was established in 1974. It was formed through a sequence of events culminating in the amalgamation of the existing Government bus operator of buses and trams (the Metropolitan Transport Trust), the metropolitan passenger services of the South Australian Railways (SAR), and the absorption of a number of private bus companies.

The two principal reasons for this amalgamation were the inability of the private bus operators to remain financially viable with the then restrictive Government control over fares and the high losses of the SAR freight services, prompting the State Labour Government to request the Federal Government to assume responsibility for these successful services.

The legislation that created the STA provides a broad charter that allows the STA to:

- provide public transport services and to conduct operations for, or related to, the provision of public transport services;

- establish, maintain, extend, alter or discontinue public transport systems; and

- undertake such other functions as are incidental or ancillary to the foregoing or as may be assigned to the Authority by the Minister of Transport

However, the charter has been restricted by the Government to the provision of an integrated network of bus, train and tram services for the Adelaide metropolitan area.

The STA now operates a public transport network covering most of metropolitan Adelaide, from Gawler in the north to Maslin Beach in the south - an operational area 74 kilometres long and 30 kilometres wide.

This network consists of 1080 kilometres of bus routes, 120 kilometres of train routes and a 11 kilometre tram track from the CBD to the seaside suburb of Glenelg A number of bus services operate on the innovative Busway track which stretches from the north-eastern suburb of Modbury to the CBD.

Bus/train connections are co-ordinated at most major railway stations and there are bus-to bus connections at interchanges and other locations throughout the city

STA customers have the opportunity to take advantage of an integrated electronic ticketing system that allows them to travel anywhere on the system for the price of one ticket.

However, whilst the STA is the only major provider of public transport services in Adelaide, it is not the only provider. A small number of scheduled services are provided by private enterprise and many specific purpose public transport services are operated by Local Government, the Education Department and a large range of semi-government and charitable bodies.

	Public Access	No Public Access
Mass movement	STA / Private "High Volume Services"	STA / Education Department "School Services"
Not mass movement	Some STA Community buses Minibus	Access cabs Red Cross, Aged homes, etc. Organised car pooling

Fig. 1

The South Australian Department of Transport, and latter its successor the Office of Transport Policy and Planning, have been responsible for public transport policy and planning since the inception of the STA but there has been limited co-ordination between the STA network and other services provided.

The change environment

Prior to the STA recommencing its corporate planning process in 1990 it had been subject to a number of adverse external reviews over the previous five or so years. The most notable of these was the 1988 Fielding Report, "Public Transport in Metropolitan Adelaide in the 1990's".

This report commenced with the memorable quote "Compared to other low density metropolitan areas, Adelaide has a superb transit system" and finished with a summary list of change recommendations covering some ten pages.

The Fielding report had a major impact on the STA, not as a result of the content of the report or the level of Government support for its recommendations, but more from the timing of the reports release and the STA management's reaction to its recommendations

The report was released by the Labour Government in May, 1989 shortly after a Cabinet reshuffle which saw a senior left wing Minister made responsible for the Transport portfolio in an election year Over the previous decade industrial action disrupting the provision of public transport services had made a major impact on South Australian elections, most notably with the failure of the Corcoran Labour Government to be re-elected in 1979

Fielding had included a broad spectrum of recommendations in this report, most of which were aimed at promoting the use of public transport and developing new management structures to ensure that such changes happened Over the same period that Fielding had been developing these recommendations, the STA had been finalising its Business Plan which consisted of a detailed series of projects directly aimed at reducing costs and as a result downsizing the public transport network. The Business Plan, which was in essence a cost reduction programme, had been instigated at the request of the Government in response to concerns raised in the media over the increasing size of the STA deficit and the decline in patronage

Although neither report was publicly released at this stage it was obvious to STA management that its Business plan would be seen as being negative and the Feilding report as positive. This concerned the STA because it felt that the issues that had given rise to the Business Plan were the direct result of the strategic decisions taken in accordance with Government policy. For instance, Figure 2 shows the change in the cost structure of the STA for the period 1985/86 to 1991/92. As the chart shows the STA had through efficiency improvements achieved a large decrease in operating costs but that these were being offset by increases in ownership costs
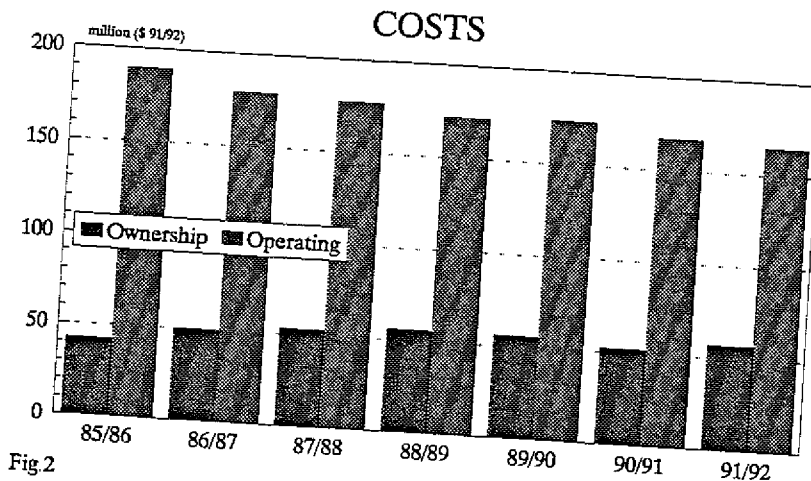
COSTS

Fig.2

The ownership cost trend (the costs directly associated with owning STA assets) was a major concern but management believed that these costs were largely outside the control of the STA as they related to Government investment decisions for the replacement of rapidly deteriorating public transport infrastructure and the purchase of new assets. For instance, over the previous few years the STA had commissioned the new Northeast Busway, resignalled the rail network, commenced a replacement railcar programme for its 30 year plus rollingstock and implemented an electronic ticketing system.

Ownership costs also increased as a result of the creation of the South Australian Government Financing Authority (SAFA) which refinanced all public sector loans at current market rates (some of the old rail loans had been at 2-3%) In the early 90's the depreciation component fo ownership costs continued to increase substantially as assets were revalued from historical to written down replacement cost.

Management was however becoming increasingly concerned with the patronage decline (see Figure 3). In the mid to late 80's the major patronage decreases could be attributed to the removal of free off-peak travel benefits to pensioners (1986), the introduction of the Crouzet Ticketing System (1987) which provided more accurate patronage figures than previous survey methods and the continuing growth of regional shopping centres which reduced CBD travel demand.
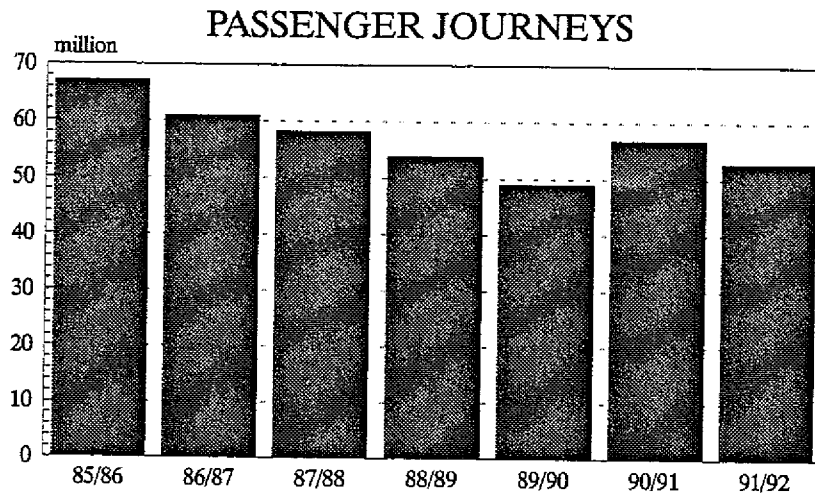
PASSENGER JOURNEYS

Fig.3

These decline factors were supplemented by management cost recovery initiatives at the turn of the decade, including a reduction in the number of services, real fare price increases and work practices/rostering changes that initiated industrial action, particularly on the rail system.

Establishing the direction

Within the STA, senior management had commenced questioning the basic assumption that guided the organisation; that the STA was there to provide efficient public transport services in accordance with external direction. This assumption caused the STA to be a reactive task driven organisation that had very little control over its own destiny.

Support for a new proactive approach gained momentum when the new Minister abolished the Department of Transport and advised that he wanted the STA to provide policy advice on the provision of public transport services, something that the STA had only undertaken in a very limited and specialist way previously. He also stated quite categorically that the Government saw the STA as a social welfare agency and as such the STA should place less emphasis on cost recovery and more emphasis on social justice issues.

This policy became obvious during the election campaign, which saw the Government re-elected in November 1989, when it was announced that there would be free public transport provided for school children. A year later, when public concern over youth access to public transport and increases in vandalism caused the Government to amend this policy, another social justice initiative reinforced this belief. The new initiative

involved the removal of the three zone fare system, a decision that was specifically designed to benefit certain socio-economic groups in outer urban areas.

By early 1990 the STA had realised that it would have to be far more pro-active if it wished to survive and prosper in the future. This would require it to obtain a better understanding of the community's transport needs and at the same time establish relationships that would enable it to influence public transport decision making

As a first step in achieving this aim a workshop was held on 14-15 June, 1990 to bring together public transport decision makers. All the organisations and groups that had an interest in public transport provision including local government, unions, public transport interest groups, social service and environmental representatives and Government planning agencies were represented at this workshop

The workshop was designed to produce a 'vision' for public transport and participants used an options model (Figure 4) as the basis for the development of an alternative scenario for Adelaide to the year 2000.
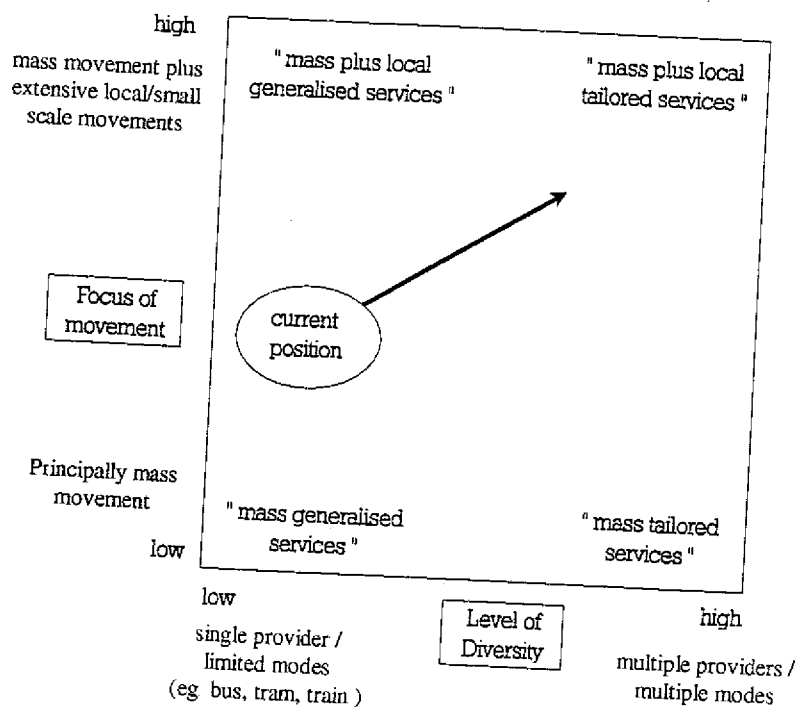

Fig. 4

In summary workshop participants believed that the public transport network needed to be changed in two areas:

- improved services on the major trunk routes linking Adelaide's main centres to better service existing customers and attract motorists from their cars;

- improved local services for those people dependent upon public transport for their mobility.

They then went on to provide the outline structure of what was ultimately the "Transit Link" network, a network designed to:

- take advantage of the existing transport infrastructure;

- design changes to take advantage of the operating strengths and cost structures of existing public transport providers;

- increase the transport options available to outer suburban residents who are disadvantaged, in comparison with inner suburban residents, in terms of the quantity of transport services available;

- make service provision more responsive to customer needs through decentralisation of local area service planning responsibilities and the development of consultation/liaison mechanisms to involve community groups in the process;

- implement changes only after detailed discussions with representatives of all individuals and organisations affected and computer assisted modelling of their cost and service impact

- develop the network in an evolutionary way and therefore not cause major disruption to the community, with the changeover to Transit Link expected to be completed by the year 2000;

This outline was then presented at a number of internal STA workshops attended by staff at different levels throughout the organisation. These sessions 'filled in the holes' and as a result a Corporate Plan and subsequent Branch plans were prepared to present the agreed goals and objectives for the successful implementation of the Transit Link concept.

Rather than attempt to provide a sequence of events, the last three years changes have been categorised into the three key effectiveness issues identified at the June 1990 workshop:

- the development or urban form that utilises the strengths of public transport;

- the provision of services that are more responsive to customer needs;

- the maximum utilisation of all community resources in the provision of public passenger transport

Development of Urban Form

Adelaide is an accessible city compared with other Australian capital cities and its low level of traffic congestion contributes to the excellent lifestyle that its residents have.

The original city was extremely well planned by Colonel Light and subsequent urban and transport planners have done an excellent job in ensuring that the community's principal wants, a 'home on a quarter acre block' and the easy use of the motor vehicle, have been readily accessible.

However, proponents of economically sustainable development have for some time been questioning whether planners should be supporting these perceived needs or should be influencing the urban environment in such a way that the lifestyle standard that people have grown accustomed to is able to be maintained into the future   Urban sprawl and its side effects are seen as the major inhibitor to maintaining this lifestyle.

The urban form of Adelaide is the key to the long term viability of its public transport network; the basic infrastructure of which had been developed during the first half of the century to provide radial services through medium density housing to the CBD. However, the urban sprawl has not only made public transport more difficult to operate by providing increasingly lower population densities but by creating a more diverse set of travel destinations for work, shopping and leisure.

Therefore, as part of the STA's strategic change process, a conscious decision was made to influence the direction of Adelaide's urban form.   In early 1991 a STA senior manager became a member of the team established to prepare a plan for Adelaide, the "2020 Vision"

The role that this individual played in raising the awareness of the benefits of public transport in the urban planning profession together with the extensive consultation process undertaken by the "Planning Review" clearly influenced attitudes towards public transport provision in the urban planning areana   It was interesting to note that whereas the team in the early stages of the project considered that access and mobility

were only minor issues in urban form planning, their consultation process clearly showed that they were major issues in the eyes of the community.

When the "2020 Vision - Planning Strategy for Metropolitan Adelaide" was finally released in June, 1992 it fully supported the principles of the STA's Transit Link concept. In particular, I refer to the following excerpt from the report:

> *"A major objective of this Strategy is to manage the urban activity system and the transport system so that they complement each other. It is intended that the urban form evolve so as to reduce transport demand per capita compared with an unplanned environment. In particular, it should be possible to reduce the demand for individual motorised transport."*
> *pg.67*

Much of the "2020 vision" report focused on the development of the city around regional centres of commercial and residential activity. Centres that would be connected by a mass transit system and supported by local transport feeder systems.

Although all concerned have recognised that the alteration of urban form is a long term challenge, some initiatives have already commenced over the last year to support the strategy outlined. These initiatives include:

- the development of bus/rail interchanges at Noarlunga and Smithfield/Munno Para regional centres;

- the formal involvement of STA people on key urban planning groups

Provision of Customer Responsive Services

Understanding what the customer wants and delivering services that meet these need expectations is the underlying theory of most modern management texts.

However, it can be argued that the public transport industry has not adhered to this basic business theory for some time. With the large numbers of people being transported by the big public sector transport authorities the customer has over a period of time been reduced to a number. Substitutes for the word customer, for example patronage and boardings,are commonly used in the public transport industry. These are terms that reinforce the task orientated approach to the business, an approach that ignors the individual mobility needs of different customers and market segments.

A few years ago the Adelaide public transport network was an excellent example of how to provide a task orientated service rather than a customer driven one. It provided similar stopping services on radial routes throughout the city, using standard size rigid buses that operated on a route numbering system suited more to the design of the transport network than the customer's information requirements. There were exceptions to this nondescript approach, some express and limited stop services were provided but

these were slowly being removed as the organisation attempted to meet everyone's travel needs by transfering resources from fast, direct services that provided a reasonable route service frequently to wandering, slow services on suburban routes that previously had no service at all. Articulated buses which formed a large proportion of the STA fleet did provide an alternative bus type but these vehicles had been justified on the basis of efficiency rather than customer need.

With the continuation of the urban sprawl the STA's ability to provide an adequate level of service declined substantially. Something had to be done to ensure that efforts were focused on the things that could be done well and that those things that could not be done well were to be eliminated. This resulted in the decision to concentrate on mass transit and to get out of low demand services which were deemed as unsuitable for the existing cost structure.

This new way of thinking has changed the way that the STA has gone about its business with the following list of the major initiatives implemented to improve customer responsiveness over the last two years:

- the organisational structure of the STA was completely changed with the amalgamation of the traffic and engineering functions under the control of Depot Managers, the authority to make customer responsive decisions being decentralised to Depots and the creation of a Customer Service Branch;

- all STA staff have been provided with industry specific customer service training;

- over 50,000 public transport users were surveyed to obtain detailed origin/destination data for use in the modelling of alternative public transport options;

- based on this modelling the STA has completly changed the services in the Northwest Sector of Adelaide and introduced a night service network that is different from the day base network;

- over the past year, five completely new "Transit Link" services have been introduced. These fast, frequent, limited stop services, which were designed on the outcomes of research, will form the basis of a completely new transport network for Adelaide;

- the level of market research increased dramatically with research ranging from focus groups looking at the design of bus seats to an extensive choice modelling exercise designed to determine customer preferences in service design;

- a series of Customer Forums were established to obtain direct input from the representatives of regular customers and from special customer groups, such as the elderly and disabled, into the design and operation of the services; and

- trials of alternative service types were commenced, including a taxibus service and a midibus service

This list is by no means exhaustive, but it does provide an overview of the sort of changes made to STA services and to the way it supports its people in the delivery of customer service.

One last point that should be mentioned, is that at the commencement of this change process an independent market research firm was commissioned to monitor performance. The quarterly surveys conducted by this research have been invaluable as they have allowed environmental factors to be taken into account on the bottom line, the number of customers carried

Maximum Utilisation of all Community Resources

Australia has for some time been suffering through the recession that it "had to have". In South Australia the major losses incurred by the State Bank have added considerably to the impact of the recession and the STA, as with the rest of the State public sector, has been under considerable pressure to reduce costs.

This, of course, creates substantial conflict between trying to improve the quantity and quality of services on one hand and cut costs on the other.

In order to progress these changes in the most rational way possible, two simple formulas were developed and put to the parties involved, i.e. Government, unions and Treasury. Both formulas were based on 1/3, 1/3, 1/3 principles.

With award negotiations, the STA obtained agreement that increases must be funded by productivity improvements with 1/3 of the productivity savings being taken by the Government, 1/3 given to the employees and 1/3 put back into the business through the development of new services. A similar formula was used to determine where productivity improvements would be sought. For example, 1/3 were to result from the rationalisation of services, 1/3 from improvements to work practices and 1/3 from efficiency improvements in non-core activities.

These principles have enabled the STA to make some substantial changes to the way the business is managed, the most notable of these being:

- one man operation of trains and the introduction of split shifts for railcar drivers;

- amalgamation of bus/train supervisory and support functions;

- introduction of multi-skilling and performance related pay for bus operators;

- introduction of part time employment in bus operations; and

- the commercialisation of non-core activities

These and other changes have seen STA employee numbers fall from 3457 in June, 1990 to 3195 in June, 1992. A decrease of 8% in labour inputs while output in terms of vehicle kilometres remained the same.

However, the STA is not the only user of resources to provide public transport services and there are a number of other potential providers in the community. These potential providers could include local government, private bus companies and the taxi industry.

During December, 1992 the STA arranged a workshop to get all these actors together to talk about how they could play a part in what is called complementary services. A complementary service being defined as a public transport service that complements or supports the base mass transit route network.

This workshop was extremely constructive with the end result being a high degree of consensus between both major political parties, unions, private enterprise and public sector agencies on the changes that should be made to improve the public transport system. The changes proposed are essentially for the introduction of a new public transport planning agency that has responsibility for need identification and resource allocation. It was agreed that this new agency should not be a provider of public transport services

Conclusion

With this approach of being pro-active and 'one step ahead' the STA has achieved a lot to date but it is becoming apparent that the pace of change is starting to cause conflict between senior and middle management

As it still has a long way to go before it becomes the responsive, flexible customer driven organisation that has been envisioned, it will have to overcome the middle management barriers that are a common cause delay in establishing new directions for a business. The empowerment of employees and the creation of a team based structure could be good tools for overcoming these barriers

If this can be achieved soon, then it is proable that the STA as a public transport operator will be able to survive in what is commonly believed to be an increasingly competitive environment.

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