



A Ticket to Ride: Getting passengers on-side and on-board with Integrated Public Transport Tickets



A Smogbusters Queensland Vision Statement
December 2001

Executive Summary

Smogbusters agree with the Queensland Government that an integrated public transport ticketing system is essential for South East Queensland. The new system must be easy to understand, must be equitable, and must offer the necessary set of choices to guide current and future travel behaviour. “Smart cards” are not required – just smart tickets.

The current system of “dis-integrated” ticketing for trains, buses and ferries is one of the most significant barriers to integrated public transport in the region. Integrated ticketing, if properly designed, will significantly increase public transport use and reduce unnecessary car use.

Smogbusters recommend that care be taken to ensure that the system introduced is optimally designed for SE Queensland conditions. We have waited a long time for a world-class public transport system, and integrated ticketing represents a valuable opportunity to move closer to this goal.

There are various options available to decision-makers regarding the type of ticketing system to be implemented. Below are a set of options Smogbusters believe could greatly assist in creating a user-friendly, equitable and economically viable ticketing system.

Zones

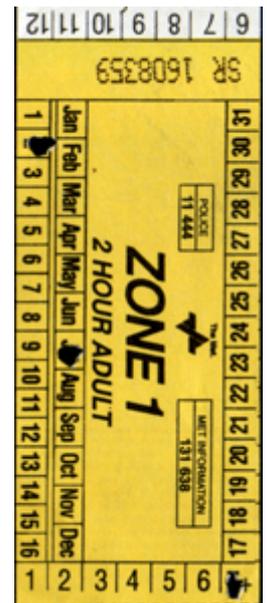
Smogbusters recommend a zone-based fare system with a minimal number of zones. Such a system would be simple for both passengers and operators to understand. We recommend adaptation of the existing three-zone “South East Explorer” multi-modal ticket system, which covers most of the SE Queensland region and is very simple.

While having fewer zones creates a simpler system, it can also result in higher fares within zones. Thus, as in Melbourne, zone boundary overlaps should be included so that trips that barely cross a boundary do not suffer disproportionately high fares. Furthermore, as in Adelaide, a “short trip” single fare ticket should be included to ensure that those making very short trips are not forced to pay the full one-zone fare.

Types of tickets

The range of tickets offered must provide for equity, choice and convenience. Though other options may provide a similar outcome if carefully designed, Smogbusters recommend the inclusion of the following ticket types:

1. “Short trip” single ticket.
2. Time-based tickets. These would comprise all tickets except the “short trip” single. They would be sold for unlimited travel within the zone(s) for periods of (respectively) 2 hours, 1 day, 1 week, 1 month and 1 year. No conditions except time should apply to any time-based ticket (i.e. return trips and transfer to any number of services are allowed in the given time period.) Time-based ticketing systems are easy to understand and encourage use of public transport for incidental trips and off-peak journeys.



a paper-based integrated ticket – Melbourne, 1990s

This ticket was for use on trains, trams, buses and light rail within Melbourne’s Zone 1.

Periodical integrated tickets provide security for parents in the knowledge that their children always have “a ticket to ride”

Relative ticket prices

We suggest that the price of an all-day ticket be equivalent to two 2-hour tickets, a weekly ticket equivalent to four all-day tickets, a monthly ticket equivalent to 15 all-day tickets, and an annual ticket equivalent to 9 monthly tickets. Such a system would reward regular public transport users and encourage the use of public transport for non-work-related travel.

Concessions

The ticketing system must be equitable. While concessions are in some ways a separate issue to integrated ticketing, it is important that any ticketing system provide concessions and discounted fares for those with special needs. We recommend that concession tickets at 50% of full-fare time-based tickets be made available to primary and secondary school children and all holders of Commonwealth Health Care cards. This would cover pensioners, seniors, Austudy and Abstudy recipients, people with disabilities and illnesses, unemployed persons, and many other low-income earners. Further consideration should also be given to providing concessions to all tertiary students.

Off-peak ticket

It is important to encourage off-peak travel to maximise use of existing services. We recommend an off-peak ticket providing a 50% discount on the 1-day ticket price.

Ticket pricing

Brisbane Transport bus and ferry fares have increased by 50% since 1998 through substantial Council fare adjustments as well as the imposition of the GST on public transport. Patrons were hit with another blow with the removal of weekly and monthly tickets – a move that has also discouraged off-peak and incidental public transport trips. In the meantime, QR Citytrain fares have also recently increased by a considerable margin.

It is acknowledged that in the transition from one fare system to another, certain fares on particular routes or modes may increase while other fares may decrease. We emphasise, however, that **integrated ticketing must not be used as an excuse for another unwarranted fare increase across the region's public transport system.** The convenience of integrated ticketing will boost patronage and allow an overall reduction in fares, thus improving public perceptions and boosting patronage further.

Ticket technology

While studies in the 1970s were preoccupied with finding the right technology to implement integrated ticketing, lack of appropriate technology is no longer an acceptable excuse for the non-availability of integrated tickets. **Integrated ticketing does not require "smart card" technology**, although smart cards may provide a convenient method of fare collection. Multi-modal tickets are offered in Melbourne, Adelaide and Perth without smart cards, and many other cities around the world provide totally paper-based integrated ticketing.

Service provision contracts

Integrated ticketing provides an opportunity for all of the region's public transport operators to work together to combine their various **services** into an actual public transport **network**. The integrated network will attract many more passengers than disjointed services ever could. We believe all operators will benefit from a system where all revenue goes to one central body which then contracts operators to provide the necessary services. Operators should receive incentives to encourage cooperation with other operators rather than continued competition for the same few passengers.

The major players in SE Queensland have, to date, been unable to agree on *either* full integration of the transport system or even integration of ticketing only. Yet in 1979 it was stated that "general agreement can readily be reached between the Brisbane City Council and Queensland Railways on a uniform system of fares." (Veitch, 1979)

Brisbane remains alone among major Australian cities in not providing integrated ticketing

Integrated network depends on a central planning authority

It appears unlikely that an integrated network will be achieved without a single body in SE Queensland taking responsibility and authority for central planning decisions. Smogbusters recommend that the Queensland Government, in consultation with all public transport stakeholders bear ultimate responsibility for all public transport funding, network planning, service levels and overall performance.

Conclusion

The community is weary of the endless talk about “integration” while no real progress is made. Integrated ticketing can restore community confidence in the ability of our governments and public transport operators to deliver a truly integrated public transport network for a livable, equitable and sustainable South East Queensland.

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Smogbusters Queensland is part of a national program to promote clean air and sustainable transport, and is a joint initiative of the Queensland Conservation Council and the Federal Government through the Natural Heritage Trust.

The views expressed in this paper do not necessarily represent the views or reflect the policies of the Federal Government or Environment Australia.

Copies of this Smogbusters Queensland Vision Statement can be downloaded from <http://www.qccqld.org.au/smogbusters/files/IntTick.pdf>

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1. Introduction

Smogbusters Queensland is a community sector, non-government organisation whose purpose is to promote clean air. Because three-quarters of all air pollution comes from motor vehicles, and because transport-related greenhouse gas emissions are rapidly rising, one of our primary focuses is to encourage the establishment and use of a sustainable transport system in SE Queensland.

We believe the introduction of integrated ticketing across SE Queensland's public transport system is an essential step towards a sustainable transport system for the region. A well-designed integrated ticketing system will increase the proportion of trips by public transport and reduce car use.

As will be shown in section 3, SE Queensland has waited a long time for integrated ticketing. But after 31 years of failure, governments and public transport operators must establish a high-quality integrated ticketing system without further delay.

Only a seamless public transport network can compete with the door-to-door convenience offered by the private motor vehicle. Unfortunately, while the Queensland Government's *Integrated Regional Transport Plan* for South East Queensland (QT, 1997) is full of references to "integration", actual steps taken towards the integration of trains, buses and ferries within the region have been difficult to identify.

"Integrated Ticketing" is when one ticket and one fare structure are used across all public transport modes and operators. Providing an integrated ticket is a major step towards an integrated public transport network. It can have substantial immediate benefits for users and can set the stage for further integration of services – **but only if you have the right integrated ticket.**

The only way to avoid ever-worsening road congestion is to invest in alternative transport to give people the ability and the incentive to leave their cars at home. Additional road space (new or widened freeways, tunnels, bridges or arterial roads) will only encourage more people to drive, which in turn will fill the additional road space and take us further down the spiral of ever-increasing traffic congestion. Our economy cannot afford to construct or even maintain an ever-expanding field of bitumen, and eventually urban motorists will be directly charged through road or cordon pricing.

On the other hand, one train carrying 1000 passengers can remove 800 cars from our roads, and one bus with 50 passengers can remove 40 cars. If high-quality alternatives to the car exist, people will use them to avoid the congestion and stress on the roads.

2. What is Integrated Ticketing?

integrate *v.trans.* to render entire or complete; to make up (a whole); b. to complete (what is imperfect) by the addition of the necessary parts. (Onions, 1978)

Integrated ticketing means one ticket and one fare structure for all forms of public transport within a specified area.

Integrated ticketing:

- is a prerequisite to a fully integrated public transport system.
- does not require the system to be fully integrated before introduction.
- is a very useful and relatively easy first step in the direction of full integration.
- will immediately make public transport easier and more convenient to use.
- does not require additional infrastructure.
- will get more people out of cars and onto public transport.

It is planning and politics... and not urban form, which have prevented Melbourne and other Australian cities from having European-style public transport ... Infrastructure and technology fetishism will have to be abandoned ...the most necessary change is not to public transport itself, but to transport politics" (Mees, 2000).

You can **never** road-build your way out of congestion – the cars just keep coming

For 2001-2002, road funding is once again described as the "cornerstone" of the Transport and Main Roads budget (C-M, 20 June 2001)

2.1 Integration means more riders, less drivers

Integrated ticketing can encourage increased use of public transport by...

1. providing the same fares and the same tickets on **all** public transport services in the region, thereby making it simpler and easier to use public transport.
2. simplifying trips that involve more than one service (e.g. bus-train or train-ferry).
3. increasing the use of under-utilised parts of the public transport system, especially off-peak services.
4. making public transport more affordable and more equitable.
5. providing the basis for further steps in the future toward an integrated transport system, including synchronised services and timetables, or high service frequency that requires no timetable.

2.2 Integration can make the most of the rail system

SE Queensland is privileged to have an extensive, internationally-renowned electrified rail network. Integrated ticketing is essential to allow maximum benefit of this rail network by facilitating the introduction of an integrated public transport network where bus services are planned to connect to railway stations.

The current fare structure encourages bus operators to keep a passenger on board for as long as possible. With integrated ticketing, they could instead be encouraged to allow people to exit at a rail interchange for the rest of their trip to the CBD. This would free up the buses to run more local services, would enable QR to increase the frequency of their Citytrain services, and would prevent the need for expensive widening of arterial roads for additional bus lanes or busways. And the bus operators would benefit from more passengers as a whole using public transport.

3. Dis-integrated public transport

Integrated ticketing will not by itself solve all of the problems of a fragmented public transport system, but it would be an excellent start. Every traveller in SE Queensland suffers the effects of the different public transport operators' failure to adopt an integrated approach to transport policy. The present system includes the following features:

1. Crowded roads cater for ever-increasing numbers of private vehicles, resulting in congestion for commuters as well as increased levels of air and noise pollution.
2. A steady decline in public transport usage since the 1970s, combined with rising levels of private vehicle use. Until at least 1996 this trend has been greater in Brisbane than in any other Australian capital.

Travel by passenger motor vehicles in capital cities, per capita (Mees, 1997)

Km travelled in	1976	1996	% Increase
Adelaide	6457	7578	17
Perth	6807	8545	26
Canberra	6070	7745	28
Melbourne	6156	7940	29
Sydney	5590	7330	31
Brisbane	5557	8247	48

3. Government has responded by building ever more roads.
4. Constantly rising public transport fares (e.g. Brisbane City Council bus and ferry fares have increased 50% since 1998).
5. Uneven fare structure, i.e. different rates on buses, trains and ferries.

The major players in SE Queensland have, to date, been unable to agree on *either* full integration of the transport system or even integration of ticketing only. This, despite the fact that in 1979, it was considered that "general agreement can readily be reached between the Brisbane City Council and Queensland Railways on a uniform system of fares." (Veitch, 1979)

The new chief of Queensland Rail has stated three main goals:

To maintain QR's market share in the state and grow in revenue;

To ensure the company remains competitive; and

To continue the emphasis on safety. (C-M, 4 June 2001)

But what about more passengers, and what about integration?

"It's not our fault."

The Brisbane City Council recently raised bus and ferry fares, justifying the increase by stating: "In other capital cities, the state and federal governments contribute a lot more funding for running bus services." (Brisbane Transport, 2001)

6. Apparent lack of cooperation between different levels of government.
7. Under-funding and uneven funding of different parts of the public transport system.
8. Redundant public transport services (buses and trains competing for the same routes while other routes remain unserved).
9. Few co-ordinated links between different modes or services.
10. Little apparent commitment to patronage growth or integration of the entire public transport network by the major operators.
11. When money is spent on public transport, it is spent on infrastructure, rather than integration. Integrated ticketing requires little additional infrastructure and very little cost, and would be a significant step towards a seamless, integrated network.

Billions of taxpayer dollars have given us an electrified rail line and a busway that each go part of the way from the Brisbane CBD to the Gold Coast, as well as an 8-lane freeway that goes all the way. With few public transport links to the rail line even from the busway let alone from a suburban front door, it is no wonder most travellers choose their cars.

3.1 *Brisbane lags behind*

Figure 1 illustrates the 31-year failure of governments, transport planners and public transport operators to establish an integrated ticketing system for SE Queensland. The list includes transportation studies recommending the establishment of integrated ticketing; government policies and media releases claiming that integrated ticketing is already on its way; even parliamentary inquiries ordering government departments to get moving.

In reality, though, history shows that **Brisbane remains alone among major Australian cities in not providing integrated ticketing.**

The integrated ticketing debate has been won in most Australian capital cities – Adelaide in 1977, Perth in 1979, Melbourne in 1983 and Canberra in 1998. Even Sydney, the only other Australian capital city with separate, competing public transport systems, has a weekly multi-modal travel pass providing unlimited travel on trains, buses and ferries.

Integrated ticketing reached... Adelaide in 1977; Perth in 1979; Melbourne in 1983; and Canberra in 1998.

Over many years in Brisbane, studies, reports, administrators and politicians have expounded the benefits of integrated tickets. There is no logical reason for further procrastination. It becomes very easy to agree with the summation of Paul Mees;

“It is planning and politics, including the professional politics of transport planners, and not urban form, which have prevented Melbourne and other Australian cities from having European-style public transport ... Infrastructure and technology fetishism will have to be abandoned ...the most necessary change is not to public transport itself, but to transport politics.” (Mees, 2000)

Even Sydney, the only other capital Sydney without full integration, has a weekly multi-modal travel pass for use on trains, buses and ferries.

4. Why is Integrated Ticketing Essential?

4.1 *Co-ordination of services*

In 1970, a public transport study by Wilbur Smith & Associates stated:

“The efficient and economical operation of public transport requires full co-ordination of services, the elimination of wasteful duplication and the use of each type of transport vehicle and system to meet the particular needs it can best serve.” (Wilbur Smith & Assoc, 1970)

Integrated ticketing is a logical first step towards the long overdue co-ordination of services.

Figure 1: 31 years later – a “bed of nails”¹

The well-known BBC comedy *Yes, Minister* once referred to integrated transport as “a bed of nails, a crown of thorns, a booby trap”. And it is still a bed of nails in SE Queensland, despite the plethora of politicians, bureaucrats and consultants who have recommended an integrated ticketing system since 1970. Here is a summary of 31 years of talk about integrated ticketing.

- **1970 (March) Wilbur Smith & Associates - SE Qld Brisbane Region Public Transport Study**
Recognised the need for *a single fare for multi modal transport*.
- **1976 Wilbur Smith - Literature Review of Fare Systems for Public Transport Services**
Brief for the report was to *aid in the decision process relative to a fare system for unified services*.
- **1976 (Oct) Metropolitan Transit Authority (MTA)** formed in Oct 1976 to *develop an integrated and efficient system of public transport in the declared region*.
- **1979 Review of the Brisbane Fare System** *The need for integrated services ... requires the adoption of a totally integrated fare system*. A firm commitment to integrated ticketing was requested by early 1980 to allow the system to be implemented prior to the 1982 Commonwealth Games.
- **1984 (June) Courier-Mail** Minister for Transport, Mr Lane, *blamed the demise of the MTA on the lack of co-operation between the BCC and the MTA*. BCC Transport spokesman, Ald Leese, *denied this and blamed the demise on Mr Lane’s emphasis on trains at the expense of buses*.
- **1990 (July) Courier-Mail** The Transport Minister, Mr Hamill announced *Single travel ticket for bus and train could be introduced under Government moves for an integrated transport system*.
- **1991 Hansard South East Queensland Passenger Transport Study (SEPTS)**
A 21-month study ... 49 recommendations ... including integrated ticketing. *This year, \$500,000 is being spent on the development of integrated ticketing arrangements* (Mr Hamill).
- **1997 Integrated Regional Transport Plan (Qld Government)**
Included provision for *a common face and ticketing arrangements*.
- **1997 (July) Qld Parliamentary Public Works Committee Inquiry into the SE Transit Project**
Recommended *that QT in cooperation with QR and BCC review fare structures establish an integrated ticketing system... and that the system be operational within 12 months*.
- **1998 BCC Brisbane Corporate Plan 1998-2002** *Introduce an integrated ticketing system for buses, ferries and trains together with Qld Rail by December 2000*.
- **1999 BCC Brisbane Corporate Plan 1999-2003** *Integrating bus/rail/ferry services by 2002... innovative fare and ticketing policies*.
- **1999 Qld Environment Protection Agency: SEQ Regional Air Quality Strategy Action TSP 5.5**
– ...*the development of integrated multi-modal ticketing*. (Start: 1999. Duration: Ongoing)
- **2000 Queensland Road Use Management Strategy (QT)** *Improving public transport to provide an attractive and realistic alternative to car travel is one of the single most important issues for the better management of road use. Support the development of integrated ticketing systems*.
- **2001 Transport 2007 (QT)** *Integrated ticketing, fares, information and branding of the public transport network. By 2007 SE Queensland will have an integrated public transport network*.
- **2001 BCC Seven Themes of Liveability** *An accessible city is affordable, safe and open to all. An integrated public transport system with a single ticket will let us travel easily, quickly and cheaply*.
- **2001 (June) Courier-Mail – Integrated-ticketing push gains impetus** *The State Government has recommitted itself to the troubled integrated ticketing project, promising a “strong focus” on finalising the project over the next 12 months*.

4.2 Transferring between services made easy

The wise public transport user in SE Queensland will do anything to avoid making a transfer. After all, they know our public transport system is totally dis-integrated, that their bus is likely to be timetabled to miss their train by one minute, and that the whole experience will actually cost them more than sitting in one smoky diesel bus stuck in traffic for the entire trip.

¹ The full *Yes, Minister* excerpt: “Lunched with Sir Mark Spencer today. He and the PM are keen to bring in an integrated transport policy. ... MS and I agreed that this job was indeed a bed of nails, a crown of thorns, a booby trap – which is why I suggested Hacker, of course.” (BBC, 1984)

However, these inconveniences are the result of dis-integrated public transport, not the result of transferring services. Many cities co-ordinate their services so that a local bus delivers passengers to the nearest train station two minutes before the next train, and on the return trip a bus waits for the train to arrive before delivering passengers to their doors. Or even better, all services run at a high enough frequency to ensure that no one has to wait long for their transferring service.

Integrated ticketing is the most important prerequisite of convenient transfers in a seamless public transport system. As Paul Mees states, "From the passenger's point of view, transferring between services is an inconvenience. Requiring an extra fare for the disservice is adding insult to injury." (Mees, 2000)

Integrated ticketing removes the "transfer penalty", as described in the Wilbur Smith study:

"Implicit in the concept of co-ordinated bus and rail service is that the fares for regularly scheduled services should be fixed so that, as far as is reasonably practical, the charges shall be the same between the same general areas on all routes and services, and that no penalty shall attach by reason of a passenger having to change vehicles to complete his journey." (Wilbur Smith & Assoc, 1970)

As soon as passengers begin to take advantage of transfers to avoid on-road traffic congestion, public transport operators will realise how important it is for them to work together. A long-term benefit of integrated ticketing is that different operators begin cooperating for their own financial benefit, and soon a disjointed set of services becomes an integrated, seamless public transport *network*.

4.3 Assisting in operational and financial efficiency

Integrated ticketing can, if properly implemented:

1. Reduce the cost and simplify the procedures of selling fares.
2. Reduce fare evasion and the cost of fighting fare evasion, by simplifying ticketing arrangements.
3. Allow for less expensive and more equitable fares without altering revenue levels.

4.4 The Importance of publicising options

Another reason commuters choose private vehicles over public transport is simply not knowing what services are already available. Existing services should be publicised through individualised marketing and mass media advertising. In addition, a network map and vastly improved and standardised timetables should be made available.

The Western Australian Government's "TravelSmart" program (Transport WA, 2000) is a very successful model of individualised marketing. It disseminates transport information to homes, workplaces and major destinations (schools, universities, etc), and even escorts first time users onto the system. This type of program would contribute significantly to the success of the new integrated ticketing system. A TravelSmart program is far preferable to a standard media campaign due to the very personal nature of travel behaviour choice.

5. Smogbusters' Vision for Integrated Ticketing

There is no single, undisputed method of establishing an integrated ticketing system. However, experience in other cities has shown some approaches to be more successful than others. Smogbusters therefore recommend a simple, time-based fare structure with minimal zones for South East Queensland. This will provide a ticketing system that is easy to understand and simple to operate.

"From the passenger's point of view, transferring between services is an inconvenience. Requiring an extra fare for the disservice is adding insult to injury." (Mees, 2000)

Public transport operators should be competing against private motor vehicle travel, NOT against each other.

Infrequent PT users travelling from Moggill to the City may not realise they can avoid a 30-minute wait in the Coronation Drive "car park" by changing to a train at Indooroopilly or Toowong. A trip request via the TransInfo website provides only the bus option.

And when requesting details for a Toowong-City trip, the majority of returned options are via bus, despite the train being a quicker, cheaper and greener option.

Our recommended structure will assist in:

- minimising implementation costs;
- using existing technology;
- minimising fare collection costs;
- minimising fare evasion; and
- providing statistical usage information.

5.1 How much? Increased patronage is the aim

In its recent promotional brochure *The Bus Fare Increase*, Brisbane Transport stated: "Our buses are a service, they don't run at a profit" (Brisbane Transport, 2000). This was given as a justification for a fare increase that was sure to decrease bus patronage.

When the costs are analysed, the question arises: Why do we charge fares when we should be paying people to use public transport?

Motorists cost the taxpayer far more than public transport

The 1960s saw the end of the period when public transport "ran at a profit". Public transport, however, consumes a much smaller amount of the public purse than private road travel. According to *The Age*, over the past 30 years the Australian Federal Government has spent about \$43 billion on public roads and about \$1 billion on all forms of public transport (*The Age*, 26 Nov 2000). By rigorous "user pays" criteria, those people who do not use private motor vehicles, and instead travel by foot, cycle or public transport, should in fact be paid a subsidy for their positive actions.

At present, the costs of road-building and maintenance, crashes and the ensuing injuries and deaths, noise and air pollution, property devaluation near roads and the health costs of much of the above are all **subsidised**, while funding for public transport remains severely limited. Most government funding, including rail, now requires a return on assets. **But where is the return rate from road construction?**

Over the past 30 years the Australian Federal Government has spent about \$43 billion on public roads and about \$1 billion on all forms of public transport (*The Age*, 26 Nov 2000)

Success of "Busabout" fare reduction

In 1999, Brisbane City Council's Transport Chairperson Cr Maureen Hayes, speaking of the "Busabout" ticket issued during the previous holiday period, said: "Last Christmas we had a flat \$2 fare across the whole system of buses and ferries. Now we lost an enormous amount of money on that but we gained 20% patronage increase" (ABC Radio National, 1999). This is a dramatic increase in a very small time period. All effort should be made to regain and hold these public transport users. This is a clear sign that a cheap and simple fare structure will bring a large patronage increase. The small cost to government will be repaid many times through savings in road construction and reduced costs relating to motor vehicle use.

The two types of public transport user: getting them both on board

"**Choice riders**" are those who have other transport options but choose to use public transport instead. "**Captive riders**", on the other hand, lack full-time access to motor vehicles or other transport options and have no choice but to use public transport. They include the young, elderly, poor and unemployed. They also increasingly include those environmentally committed "captive by choice" who decide not to own a motor vehicle.

"**Choice riders**" are those who have other transport options but choose to use public transport instead.

Choice riders can be induced to switch to public transport through attractions such as travel time, comfort, convenience and significant price savings over private car use. When fares rise, choice riders tend to return to their cars, but captive riders are more detrimentally affected and tend to walk more, cycle more, or simply stay at home, severely limiting their lifestyle. The poorest and most marginalised may also be tempted to evade fares.

"**Captive riders**" lack full-time access to motor vehicles or other transport options and have no choice but to use public transport.

If implemented correctly, integrated ticketing will lead to a significant increase in public transport use and a decrease in motor vehicle use.

Recommendation 1:

- *Ticketing policy should aim to provide mobility at an affordable price for captive riders, and to encourage large increases in the number of choice riders using public transport.*

When fares rise, captive riders tend to walk more, cycle more or **simply stay at home**, severely limiting their lifestyle.

5.2 Zone-based fares over distance-based or flat fares

Distance-based fares are measured by the number of stops, stations or sections travelled through. **Zone-based fares** are based upon a set of zone boundaries (often a set of concentric circles around the central point of the system) superimposed on a map. They are measured by the number of times zone boundaries are crossed. A **flat fare** is the same fare for any trip, however long or short. It can be conceived as a zone-based system with only one zone.

Distance-based fares are measured by a number of stops, stations or sections travelled through.

At present Brisbane has a distance-based system for rail, and two separate zone-based systems for buses and ferries.

Zone-based fares are based on a set of zone boundaries (often concentric circles around a central point).

Distance-based ticketing

The advantage that has been expounded for distance-based fares is one of equity between those making short and long trips. However, there are other ways of delivering equity, and its benefits are far outweighed by the problems of complexity for both buyer and seller, scope for fare evasion and/or accidental use of incorrect tickets.

A **flat fare** is the same fare for any trip regardless of trip length.

Flat fare

A flat fare ticket is the most economical in terms of cost effectiveness, simplicity and, given that it is attractively priced, ability to draw new users to the public system. However, given the size of the SE Queensland region combined with the issue of equity between short- and long-distance travellers, a flat fare would be impractical.

Zone-based ticketing

A zonal system with fewer zones than the present bus and ferry systems would provide far more simplicity than a distance-based system, while also being more equitable than a flat fare system. Such a system would especially encourage public transport use within zones, including the car-choked CBD area. Overlapping zone boundaries would allow those just barely crossing zone boundaries to pay only the within-zone fare.

A zonal system with fewer zones than the present bus and ferry systems would provide far more simplicity than a distance-based system, while also being more equitable than a flat fare system.

Recommendation 2:

- *The implementation of a zone-based system.*
- *A minimal number of zones, preferably one or two only for the Brisbane City Council area.*
- *The best option could be a three-zone system for the area currently defined by the South East Explorer tickets.*
- *Zone 1: 25km from Brisbane radius (to Petrie and Kingston).*
Zone 2: 45km from Brisbane radius (to Ormeau and Redcliffe/Elimbah).
Zone 3: The rest (to Cooroy/Noosa and the NSW border).
- *An overlap of up to three stops on all zone boundaries.*
- *A “short trip” single fare for travel within local neighbourhoods.*

5.3 Trip-based vs time-based fares: the case for a time-based system

Trip-based fares are charged for a certain number of trips. **Time-based fares** are charged for a certain period of time, within which an unlimited number of trips can be made within the prescribed area.

Trip-based fares are charged for a certain number of trips.

There is little need to reinvent the wheel. All current Australian integrated ticketing systems are time-based. All previous Queensland transportation studies have seen

Time-based fares are charged for a certain period of time, within which an unlimited number of trips can be made within the prescribed area.

time-based tickets as the only viable option for providing integrated ticketing for transportation provided by multiple operators. It provides for:

- ease of use by both seller and buyer;
- little scope for fare evasion;
- provision of equity in a minimal zone system such as that recommended above (a short return trip would be available at the same cost as a longer single trip); and
- simplicity of data collection for statistical and revenue information.

Recommendation 3:

- *Basic fare: a two-hour time-based fare within the prescribed zone(s) with no restrictions of use other than time.*
- *Neighbourhood fare: Under our model, this “short trip” single fare for neighbourhood trips would be the only distance-based fare available.*

All current Australian integrated ticketing systems are time-based. All previous Queensland transportation studies have seen time-based tickets as the only viable option.

5.4 Pre-purchased periodical tickets: The foundation, not a “bonus”

Periodical tickets (not single-trip or multi-trip tickets) should be regarded as the cornerstone of the fare system, and should be recognised as the major source of public transport revenue.

Periodical tickets are long-term time-based tickets, e.g. weekly, monthly, semesterly or yearly

Periodical tickets:

- provide a well-justified lower fare for regular users of public transport;
- provide advance knowledge of traveller volumes for transport planning purposes;
- minimise fare collection costs;
- minimise transport boarding times;
- encourage both peak and off-peak use of public transport services;
- provide an extremely simple and effective method of budgeting for transport costs by regular public transport users;
- allow for unexpected changes to travel plans (without financial loss); and
- provide security for parents in the knowledge that their children always have “a ticket to ride”.

Pre-purchased periodical tickets (not single-trip or multi-trip tickets) should be regarded as the cornerstone of the fare system

An inquiry into pricing of public passenger transport services in NSW noted:

“The Tribunal believes that public transport fare structures need to be better framed in a manner consistent with the core business activities of the business. The Tribunal believes that fare structures should be based upon each agency’s core business activity. All other fares should be set in relation to the core product(s). Where commuting is the main business (e.g. CityRail and Sydney Buses), fare structures should be based on periodical and multi-trip tickets.”
(IPART NSW, 1996)

Rather than providing a discount to standard fares, and therefore representing “lost revenue” to operators, periodical tickets should be seen as the main fare, with a surcharge applicable to single ticket sales. In addition, multi-trip tickets with a 15% to 20% discount on single ticket sales would provide an incentive for non-regular users to pre-purchase tickets.

Recommendation 4:

- *An all-day fare priced at twice the 2-hour fare.*
- *A weekly ticket priced at 4 times the all-day fare.*
- *A monthly ticket priced at 15 times the all-day fare.*
- *An annual ticket priced at 9 times the monthly ticket.*

5.5. Concession fares

Social aims

A recent issues paper on transport concessions from the NSW government provides the chief rationale for concession fares: "Transport concessions are the way the NSW government ensures that low-income groups have more choices about actively participating in our community through greater access to transport" (NSW PTA, 1999). Equitable access for all is one of the most central purposes of a public transport system, and it depends on a comprehensive and consistent suite of concessions.

An equitable system of transport concessions would provide **all** low-income groups access to lower fares.

Operational aims

It should not be a disadvantage to have a comprehensive set of concessions in place. They are consistent with a better service, and impact positively on the following areas:

- ease of use;
- discouraging fare evasion; and
- keeping the "captive" users of public transport "on board".

Transport Concessions ensure that low-income groups have more choices about actively participating in our community through greater access to transport

"Captive" riders are not so captive that they may not be forced to simply stay at home.

The unemployed

Queensland has, to date, provided fewer transport concessions than most other Australian States. For example, the unemployed, who are required by the Federal Government's "mutual obligation" policy to seek work and attend job interviews, Centrelink interviews and Intensive Assistance sessions at the Job Network, are provided no federal financial assistance for travel costs and are also denied public transport concessions in Queensland.

An equitable system of transport concessions would provide all low-income groups, including the unemployed and some tertiary students, access to lower fares. It is worth noting a Brisbane City Council Opposition press release from June 1990 which stated: "A Labor-led Council will also provide concessional fares for the unemployed to offer them incentive to use the public transport system" (Mellifont, 1990).

A "non core" election promise:

Off-peak fares

Off-peak fares are a proven method of transferring the transport load away from peak travel times. The definition of "off-peak" has varied significantly between different transport providers within and outside Brisbane City. A single definition will remove passenger confusion in this area. There are currently a broad range of concessions, discounts and off-peak tickets provided by SE Queensland's many operators.

"A Labor-led Council will also provide concessional fares for the unemployed to offer them incentive to use the public transport system" (Mellifont, 1990).

Recommendation 5:

- *All low-income individuals should be eligible for concession fares. This can be achieved by using the Commonwealth Health Care card as the identifier for access. It should be noted that all people on low incomes, including pensioners and tertiary students, are entitled to this card, so multiple identification cards may not be required.*
- *Concession fares should be made available to primary and secondary school children. Further consideration should also be given to providing concessions to all tertiary students.*
- *Concession fares should be set at 50% of full adult fares, and should be available for all time-based tickets.*
- *No time restrictions should apply to the use of concession fares.*
- *Off-peak daily tickets, available for use at any time outside the peak hours, should be available for all passengers at the concession rate.*

5.6 Ticket Technology

Studies in the 1970s were understandably concerned with ticket technology. However, in the 21st century, it is no longer acceptable for technological deficiencies to be given as an excuse for the non-availability of integrated tickets. **Integrated ticketing does not require “smart card” technology.** Multi-modal tickets are offered in Melbourne, Adelaide and Perth without smart cards, and many other cities around the world provide totally paper-based integrated ticketing.

Smart cards are not a substitute for ticket integration, but a convenient way of buying tickets.

IPART NSW (1996) stated: “Smart cards are not a substitute for ticket integration, but are a convenient way of buying tickets.” Smogbusters agree – we should use the best available technology to provide simpler, cheaper and more equitable methods of fare collection; but we **cannot allow the desire for tomorrow’s whiz-bang gadgetry to delay today’s implementation of integrated ticketing.**

Preliminary forms of integrated ticketing (namely the South East Explorer and the 1-2-3 ticket²) already exist in SE Queensland using current equipment and technology.

IT
(Integrated Ticketing)

does not depend on

IT
(Information Technology)

Recommendation 6:

- *Implement integrated ticketing as soon as possible regardless of whether ‘smart cards’ or other technologies are available.*

5.7 Service Contracts and a Planning Authority

While a “transit authority” was a pre-election promise of the victorious Beattie Government in 1998, the only real prerequisite for a fully integrated public transport system in SE Queensland is that responsibility for central co-ordination and planning of the network be vested in one single body. It is less important whether this body is established as a separate “transit authority” or is formed within an existing state government department.

Service provision contracts

Integrated ticketing provides an opportunity for all of the region’s public transport operators to work together to combine their various **services** into an actual public transport **network**. The integrated network will attract many more passengers than disjointed services ever could. We believe all operators will benefit from a system where all revenue goes to one central body which then contracts operators to provide the necessary services. Operators should receive incentives to encourage cooperation with other operators rather than continued competition for the same few passengers.

Central Planning Authority

It appears unlikely that an integrated network will be achieved without a single body in SE Queensland taking responsibility and authority for central planning decisions. Smogbusters recommend that the Queensland Government, in consultation with all public transport stakeholders bear ultimate responsibility for all public transport funding, network planning, service levels and overall performance.

Recommendation 7:

- *Ensure contracts between Queensland Transport and each operator establish network-based incentives for providing services that are integrated with other operators.*
- *The Queensland Government, in consultation with all public transport stakeholders should bear ultimate responsibility for all public transport funding, network planning, service levels and overall performance.*

² The 1-2-3 Ticket is an integrated train/bus/ferry ticket currently available in Brisbane that allows for one-way travel on a maximum of 2 trains and 2 bus/ferry combinations in a 2-hour period.

Abbreviations

ABC	Australian Broadcasting Corporation
ALP	Australian Labor Party
BBC	British Broadcasting Corporation
BCC	Brisbane City Council
BT	Brisbane Transport (Division of BCC)
CBD	Central Business District
C-M	<i>The Courier-Mail</i> newspaper
GST	Goods and Services Tax
IPART NSW	Independent Pricing and Regulatory Tribunal of New South Wales
IRTP	Integrated Regional Transport Plan (South East Queensland)
NSW PTA	New South Wales Public Transport Authority
QT	Queensland Transport
QR	Queensland Rail
SEPTS	South East Queensland Passenger Transport Study
SEQ	South East Queensland

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