

The Research Director
Parliamentary Travelsafe Committee
Parliament House
George Street
Brisbane QLD 4000
[per facsimile, (07) 3406 7262]

11 February 2000

Dear Travelsafe Committee,

RE: Inquiry into Public Transport in South East Queensland

Thank you for inquiring into public transport in the South East Queensland region.

The Queensland Conservation Council (QCC) has been centrally involved in sustainable transport planning, advocacy and education in the SEQ region for several years. Out of this experience, we wish to make the following key points in this submission:

1. **Government policies and targets are not ends in themselves** – they must be supported by immediate and long-term budgetary commitment if we are to see any benefit from them.
2. **Public transport is not an end in itself** – it is but a means to improving the standard of living in the region through cleaner air, economic prosperity, greater mobility, less road space, fewer negative impacts on the community, and freedom from dependence on the motor vehicle.
3. **Integration** is not just a nice buzz-word – an integrated public transport network is one that makes it MORE convenient and affordable for someone without a car to jump from a bicycle to a bus to a train to their destination than it is for someone else to jump into their car and sit in traffic.
4. Because it has been proven that **new road space undermines any attempt to increase public transport use**, even if the new road space is explicitly intended to improve public transport services, we believe that funding for several expensive infrastructure projects currently under consideration must be reallocated immediately to fund wide-ranging Travel Demand Management (TDM) programs and other low-cost network improvements if the Queensland Government is serious about public transport in South East Queensland.
5. **Cycling** has a major role to play in making public transport an option for more SE Queenslanders, and must be integrated with all transport planning including public transport.

Our submission expands on each of these and provides the perspective we have gained as an active non-government education and advocacy organisation. We would be very pleased to be granted the opportunity to present before the Committee and wish you well in your deliberations.

Yours faithfully,

Mr Eric Manners, QCC

1. Missing the Target

Current infrastructure projects and planning practices are leading to the failure of the following government policy commitments:

- A. Integrated Regional Transport Plan (IRTP) for South East Queensland (1997)
- B. TravelSmart – A Traffic Reduction Strategy for Brisbane City (1995a)
- C. South East Queensland Regional Air Quality Strategy (SEQRAQS) (1999)
- D. The Queensland Greenhouse Response Strategy 1999, and the National Greenhouse Strategy (1998)

Threatened Target A: The SEQ Integrated Regional Transport Plan (IRTP) sets ambitious targets, but more importantly identifies that significant shifts in transport modal splits are absolutely essential to maintaining this region’s current relatively high standard of living.

Unfortunately, the trends are moving away from, rather than towards, IRTP targets of raising public transport trips from 7% to 10.5% of trips, and cycling trips from 2% to 8% of trips by 2011.

QCC’s Recommendation: That the state government audit all local, state and federal government transport projects for compatibility with the IRTP, and refuse to fund infrastructure that contradicts state policy commitments.

Threatened Target B: Brisbane City Council’s (1995b) Traffic Reduction Strategy went even further than the IRTP, raising public transport trips from 8.5% to 17% of trips in Brisbane City by 2011, and cycling trips from 1.5% to 8% of trips.

However, while the theme of TravelSmart was “Think twice before you drive”, BCC’s new Evolution in Motion transport plan (1999) has a focus on road-building projects. And like the IRTP, TravelSmart targets are getting further and further from reach.

QCC’s Recommendation: That IRTP audits be carried out as above, and that additional incentives be provided to encourage local councils to contribute to IRTP targets.

Threatened Target C: The South East Queensland Regional Air Quality Strategy (SEQRAQS), despite much input and effort from key stakeholders, has not received any funding, nor any real commitment, from the state government. Its recommendations include many very simple improvements to the public transport network such as timetable information at every bus stop and a move towards cleaner fuel for buses, but the \$1 billion per year spent on SEQ transport is nowhere to be seen.

QCC’s Recommendation: That SEQRAQS be funded, partially through the state transport budget; and that Queensland Transport policy incorporate SEQRAQS actions.

Threatened Target D: The Queensland Greenhouse Response Strategy (1999) matches the National Greenhouse Strategy (1998) target of limiting the increase in greenhouse emissions to 8% from 1990 levels by 2011. Considering the population growth forecast for the SEQ region over the next 20 years, and the fact that Queensland has already used up its 8% increase plus some, the state government has a lot of work to do if they hope to meet this

target. But the major challenge is the staggering increase in road space in the region, all of which will soon be contributing to ever-increasing levels of greenhouse emissions.

QCC's Recommendation: That the state government commit to ensuring that all additional trips in the region over current levels be accounted for by public transport, cycling or walking, and on existing road space.

2. Defeating the Purpose of Public Transport

Many characteristics of current public transport services in SE Queensland work against the key goals of public transport generally. Below are listed several goals and how they are counteracted by current practice in SE Queensland.

A. Cleaner air. Brisbane diesel buses can pollute up to 600 times as much as a car (Morawska, Bofinger and Ristovski, 1997). We cannot afford to have diesel buses like this on the road.

Though Queensland Transport and Brisbane City Council have promised to move towards cleaner buses, preferably compressed natural gas (CNG), we are not yet seeing them on the road.

One major concern is that the SE Busway was designed to be used by cleaner buses than those that will be available in SE Queensland by the time busway construction is completed. Residents near this busway or any other in Brisbane are likely to experience increased health risk due to diesel fuel particle pollution, which causes up to 2400 deaths in Australia each year. The Queensland Transport puts itself at risk of legal action.

QCC's Recommendation: That transport investment and priority in SEQ be given exclusively to heavy rail, light rail, low emission buses, bicycles and walking.

B. Economic prosperity. Newman, Kenworthy & Laube (1997, p.22) surveyed 218 cities and found that car-based Australian cities boasted some of the least economically-efficient transport systems in the world. Transport spending in Australian cities accounts for 13.2% of Gross Regional Product (GRP), while European cities only spend 8.0% and wealthy Asian cities only 4.7% of their GRP on transport. This is attributed to the costs of infrastructure, direct and indirect costs of the automobile, and the disappearance of quality pedestrian-friendly urban environments (Kenworthy & Laube, 1997).

The survey showed that Australian cities had only a fraction of the public transport service kilometres per urban hectare (760 compared to 4,474 and 19,474 for European and wealthy Asian cities respectively). Nevertheless, wealthy Asian cities recover 119% of their considerable public transport investment compared to 40% for Australian cities. Another product of our road-based transport system is 12.0 transport deaths per 100,000 persons compared to 8.8 in European and only 6.6 in wealthy Asian cities (Newman, Kenworthy & Laube, 1997, p.22).

The response we keep hearing from state and local government is that they cannot afford to provide the public transport services or efficiency we all know is needed to attract customers

in SE Queensland. But the truth is that we cannot afford NOT to invest in public transport immediately and continuously.

QCC's Recommendation: That SEQ transport planners begin using wealthy Asian cities and European cities as their model rather than the outdated, freeway-riddled cities of the United States.

C. Greater mobility. A good public transport system provides far greater mobility than the automobile. In SEQ, however, the only direction most passengers can travel is to or from the CBD, and even these radial journeys are soon to be limited to specific busway corridors far removed from local neighbourhoods.

Hail'n'Ride bus routes provide very good mobility to local residents by taking them from their door-step to local shops and services, as well as linking them to longer-distance rail services. Unfortunately the recent Brisbane Transport Bus Network Review provided no new Hail'n'Ride services, and bus links to train stations are still a rarity.

QCC's Recommendation: That smaller local bus routes be provided linking to shops and to existing rail lines.

D. Less road space. "Boundary effect" is when local residents feel isolated by wide, busy roads that are difficult to cross safely. Road-widening makes it more difficult for a potential passenger to get to a bus stop, often leading the passenger to simply drive a car instead, or stay at home.

Four- and six-lane arterial roads are a significant blight on the community, and are only necessary to facilitate widespread motor vehicle use. Efficient forms of public transport make use of existing road space, and very little of it. For example, one set of light rail tracks can carry eight lanes worth of automobile traffic (see the QT submission to the Public Works Committee Inquiry on the SET Project), and existing rail corridors can often accommodate additional traffic without any new infrastructure. Also, more pedestrians and cyclists cross Brisbane's Victoria Bridge each day than motor vehicles, even with only a fraction of the road space (Brisbane City Council data concerning traffic counts, personal communication, December 1999 – we have not been able to access this report).

QCC's Recommendation: That road width be limited to existing dimensions, and that state and local authorities cease using public transport as an excuse to provide more road space for motor vehicle use.

E. Fewer negative impacts on the community. Because automobiles use road space so inefficiently, policies such as the IRTP and TravelSmart acknowledge that we must rely on more efficient transport options. However, complex infrastructure projects such as the SE Transit Project are very traumatic to a community, regardless of intended use by motor vehicles or public transport.

QCC's Recommendation: That infrastructure projects be limited to existing road space, such as light rail, bike lanes or improved footpaths.

F. Freedom from dependence on the motor vehicle. This is not about appearing to spend money on public transport – it is about making it possible, and desirable, for the people of SEQ not to own a car at all, or at least to “think twice” before they drive.

QCC’s Recommendation: That the Queensland Transport build further awareness of the negatives of car use and road space, rather than funding propaganda that tries to justify transport projects that actually entrench car-dependence.

3. Integrated Connections, not just Services

Integrated, seamless, useable public transport includes the following elements:

- a cooperative body such as a **transit authority**, incorporating all public transport service providers and holding them to certain agreed upon standards and practices;
- common **ticketing** arrangements with one ticket being valid on all modes of public transport (heavy rail, light rail, bus, ferry);
- a **public transport map** for each urban area throughout SE Queensland which shows all service routes for all modes of public transport, as well as cycle links to transit interchanges;
- **frequent services** that are timetabled that allow **connections between modes** to be made easily (i.e. low waiting time, sufficient time to move between train/bus stops, etc)
- compact and accessible **hand-held timetables** providing any information that might be useful to the passenger, including connections to other modes of transport;
- **public transport stops** with posted information within easy walking distance of every house in the service area, whether for a Hail’n’ride bus, a larger bus, or a rail line, which feeds into either a major centre or to other transport that does;
- **uniform and inexpensive pricing** that encourages people throughout the region to leave their car at home; and
- **helpful, educated public transport operators**, such as bus drivers and train conductors, who see themselves as customer service representatives rather than just a driver.

In South East Queensland we have **NONE** of these essential elements.

Transit Authority. The Labor Party election platform before the June 1998 election included the following passage, which outlines more or less exactly what we would like to see in a transit authority:

To achieve integrated transport planning, Labor will ... establish a Queensland Transit Authority (QTA) with existing resources. The QTA will be established along the lines of the South East Queensland Transit Authority (SEQTA) set up in 1995, but which was dismantled by the incoming Coalition Government. The QTA will plan and oversee the provision of transport infrastructure and services in South East Queensland and Queensland provincial towns and cities. The QTA will:

- *plan and integrate a public transport system in South East Queensland and regional centres*
- *coordinate public transport with future urban developments to reduce reliance on private transport*

- *advise the Minister on budget priorities in the funding of public transport systems*
- *consult with the community before making any recommendations on transport infrastructure*

In order to advise the Minister on government expenditure priorities within regional transport plans, the QTA will develop investment criteria utilising economic, social and environmental indicators.

Labor recognises the impact of transport systems can be detrimental to the environment; and the health, safety and well being of communities. As such, Labor will require environmental and social impact assessments be conducted for all major transport projects/developments. (Queensland Labor Party, 1998)

In Zurich, the transit authority's budget includes \$750m outwards to purchase public transport services. The Authority costs \$3 million to run. This represents less than 1% of the total subsidy. As a classic "carrot and stick" approach to reducing unnecessary car trips, the entire operational budget of a transit authority could be funded through a \$50 per week levy on every car parking space within the city frame (i.e. CBD plus other inner-city business districts). QCC has obtained advice in this matter from Dr Paul Mees (Lecturer, University of Melbourne) and Dr Felix Laube who worked with the Zurich Transit Authority.

At the Brisbane City Council Vision & Values Conference in June 1999, one of the strongest demands was for a transit authority. This is because people are tired of hearing governments *talk* about "integration", and not being able to use public transport to get where they need to go.

A transit authority will give the state government the authority to require all public transport service providers to integrate their services, fares and ticketing with other providers in the region.

In contrast, we have no evidence to indicate that an integrated public transport network can be developed in SE Queensland without a transit authority. Clear evidence of this is provided by the clear failure to develop an integrated public transport ticket through recent "cooperative arrangements" involving Queensland Transport, Queensland Rail and Brisbane Transport.

QCC Recommendation: That the Beattie Government follow through on its pre-election promise to provide a transit authority.

Integrated Ticketing. It is not necessary to introduce expensive technologies in order to provide an efficient integrated ticketing system. In Adelaide and Melbourne, ticketing is cheap and simple using traditional methods – conductors on buses and trains.

Though Queensland Transport was directed by the Parliamentary Public Works Committee (Report No. 39, July 1997) to provide integrated ticketing within 12 months, current programs will not provide a ticketing system approximating "integrated" before mid-2001.

We believe a transit authority is essential if Queensland Transport is going to successfully follow through on the directive to develop an integrated ticketing system for SE Queensland.

QCC's Recommendation: That an integrated ticketing arrangement utilising existing technology be put into place this year (2000).

Public Transport Map. Most major cities in the world, including Sydney and Adelaide here in Australia, have produced a map that shows all available public transport services in the region, including heavy rail, light rail, bus and ferry. In Brisbane, however, potential public transport passengers are given only a phone number, 131 230.

Due to public demand, we have asked Queensland Transport and Brisbane City Council for a public transport map including the following elements:

- all heavy rail, light rail, bus and ferry routes clearly numbered or labelled;
- all bikeways, or at least those that connect to public transport stations;
- detailed maps of all major interchanges showing exactly where to catch each route;
- all streets, to scale, with larger streets (those with PT services) actually named, so that people can see which routes will take them to their exact destination;
- a simple table showing the frequency of each route, and first and last journey each day in each direction; and
- information on fares, where to buy tickets, disability access, bicycles on each public transport mode, storage facilities for personal items and bikes at stations – anything the new passenger might need to know in order to start using and continue using public transport in the SEQ region.

QCC's Recommendation: That a public transport map incorporating all of these elements be produced this year (2000).

High Frequency Services with Integrated Transfers. Public transport users find it much easier to catch public transport when they know the service leaves every 5 or 15 minutes, as opposed to catching a particular service, for example “the 5:03 train”. This is especially important where a dual-mode trips and transfers are involved. Currently, passengers may have to leave up to two hours early to make a public transport trip that would only take 20 minutes by automobile.

Another shortcoming of our current public transport network is that buses in particular are not able to keep up with their prescribed timetable due to unrealistic timetables that do not take into account very predictable traffic congestion and frequent pick-ups and drop-offs of passengers. This requires the bus driver to drive faster and more dangerously in order to keep up with the timetable, and sometimes in order to take advantage of their 15-minute break at the end of the journey (Brisbane City Council bus driver, personal communication, 1999).

Brisbane City Council's recent Bus Network Review (1998-99) was an opportunity to both provide connections to train service and ease the burden on over-stressed bus drivers. However, neither outcome was achieved, as the review seemed to be limited to renumbering bus routes. This measure, while making the network appear well-organised and logical, had the side-effect of completely erasing every public transport user's knowledge of Brisbane bus routes and timetables. In conjunction with this “genocide” of public transport knowledge, we have seen no additional information to date (such as timetable information at every stop as recommended in SEQRAQS, or a detailed map showing every new bus route as well as transfers to other buses and trains).

QCC Recommendation: That higher frequency services be used to encourage public transport use; and that an audit of all public transport timetables in SE Queensland be carried out in order to integrate them with each other for dual-mode transfers.

World-Class Hand-held Timetables. Public transport timetables in SE Queensland range from good enough to far from it. Brisbane Transport timetables, for example, have decreased in quality since their recent Bus Network Review, 1998-99. Route maps used to use Refidex-detailed maps to show not just the bus route, but also surrounding streets and neighbourhoods, thereby helping passengers find their way (1) from home to the bus, and (2) from the bus to their destination. Now timetables simply show a line that represents the bus route with the names of the streets the bus runs on. From this example, it is clear that not all SE Queensland public transport timetables (if any) have been put through rigorous useability testing, both by community members (users) and by experts.

In addition, SEQ timetables often fall far short of international standards for timetable layout and content. For example, research from the UK Association of Transport Coordinating Officers (ATCO) notes that though a 1981 Hull University study concluded that customers find it easier to read a timetable when journeys proceed from left to right instead of down the page, only a few authorities have adopted this style (Saxby, 1997).

QCC Recommendation: That all SEQ timetables be audited against world's best practice standards for timetable layout and content.

Public Transport Stop Information. QCC's recent surveys of community opinion on public transport (Smogbusters, 1997; 2000) reflect a strong demand for provision of a route map, timetable information and a local area map at all bus stops, supplementing the existing information available through TransInfo. This action is a commitment of SEQRAQS, and is accepted as common sense by transit authorities all around the world. The QT belief that all commuters will use mobile phones to access TransInfo is not realistic.

QCC Recommendation: That Queensland Transport make these easy, common sense, world's lowest-common-denominator measures a priority ahead of expensive infrastructure projects of questionable worth.

Inexpensive Pricing. Brisbane Transport has just completed its second successful "\$2 Busabout" trial, providing all day travel on any bus or ferry for only \$2. After the first, Lord Mayor Soorley (personal communication, 1999) admitted public transport use had risen 20% during the two-month trial, December 1998 to January 1999, but concluded that Brisbane City Council could not afford to continue offering this fare.

Considering all of the costs of car use, including billions of dollars that Brisbane City Council plans to spend on transport infrastructure over the next few years, there is no excuse for state and local governments not to provide the few million dollars of subsidy that would (1) allow the \$2 Busabout fare to continue and perhaps be extended around the region, but also (2) remove the perceived need for more road space by encouraging public transport use over car use (see section below on Travel Demand Management).

QCC Recommendation: That an inexpensive, integrated pricing scheme similar to the \$2 Busabout be implemented for the entire region this year (2000), paid for out of the road-building budget or through levies on automobile use.

Helpful Public Transport Operators. One common complaint of SEQ public transport services is that operators have made the journey difficult or unpleasant. This includes bus drivers or train conductors who refuse to help with fare, timetable and transfer information. On the other hand, helpful drivers and conductors are perceived to be going “beyond the call of duty”, therefore making the journey even more pleasant.

The provision of adequate timetables and maps will assist operators in delivering a high-quality service, but they will also need to be introduced to the concepts of customer satisfaction and marketing of services.

Bus drivers in particular who drive faster than necessary or faster than legally allowed are a particular case in point. Passengers are tossed around and find the trip to be uncomfortable, or indeed dangerous for some passengers with disabilities and the elderly. In addition, unnecessary acceleration and speed produces far more noise and pollution; and other road users including cyclists and pedestrians become intimidated by buses, rather than perceiving them to be a pleasant and positive form of transport.

QCC Recommendation: That all public transport operators be converted into “customer service representatives”, and that an audit be carried out of customer perceptions of public transport services in SE Queensland.

4. The Affordable (and Only) Solution

The Australian government has given \$43 billion to roads since 1975 and only \$2 billion to rail and urban public transport. The freight rail system and our urban public transport systems are now creaking at the seams. Road accidents cost Australia \$12 billion and air pollution costs \$500 million each year in Brisbane alone. Studies show cities with good public transport have good urban economies.

This section lists in detail several ways transport planners in SE Queensland can affordably solve the region’s transport woes, and improve air quality and international greenhouse obligations at the same time. QCC’s action plan includes the following:

- avoiding induced traffic;
- managing travel demand;
- considering wider social benefits and costs;
- building light rail, not busways;
- extending heavy rail;
- ensuring pedestrian access;
- upgrading services at stops and stations; and
- consulting the public.

Avoiding Induced Traffic. Induced traffic is a well-documented phenomenon in international transport studies. “Expanded road capacity enables vehicles to travel faster (but) time savings are wasted because people drive more” (Surface Transport Policy Program (STPP), 1998, p.6).

Research on induced traffic provides evidence where newly built highways have resulted in substantially increased traffic – an average of 30% more traffic is generated. A recent

Californian study (Hansen and Huang, 1997) looks at 30 urban counties concluding that for every 1% increase in new land miles (of road space), traffic increases by 0.9%. “When road capacity is expanded near congested routes, drivers far and wide will flock to the new facility hoping for reduced travel time, thereby increasing the total amount of traffic in the region” (STPP, 1998, p.6).

The opposite is also true: road congestion or closures helps reduce traffic. “New evidence shows that closing roads can eliminate traffic.” STPP’s journal provides startling evidence from UK studies. “Researchers found that when part of London’s notorious ring road, the “ring of steel”, was closed in 1993, traffic fell 40%, and air pollution dropped 15%. London’s Hammersmith Bridge provided further evidence when it was determined incapable of carrying its total of 30,000 vehicles a day. The bridge has been closed to all traffic except buses and cyclists since last February. London’s Transport Department surveyed people who used the bridge a few days before it closed, and then contacted the same people in the weeks following the closure. Of the commuters who used the bridge to get to work, some switched to public transit and others chose to walk or bike. Overall, 21% no longer drove to work. And remarkably, congestion in the surrounding area has not markedly increased” (STPP, 1998, p.5).

Every dollar spent making car travel more convenient offsets any money spent on alternative transport options. The only investment in public transport is *non-investment* in motor vehicle transport.

State and local governments of SE Queensland are adding road space at unprecedented rates. Every one of these infrastructure projects add nothing to public transport services in the region simply because they make driving a car more convenient and more attractive. The most offensive projects are:

- Inner City Bypass
- Pacific Motorway widening
- SET Project
- Inner Northern Busway
- Coronation Drive widening
- Waterworks Road widening

The state government has stated that the basis of their transport budget is “jobs” (Queensland Transport, 1998). Unfortunately, road-building and infrastructure can only increase car use as it increases road space. The only exceptions to this rule are infrastructure projects that install light rail on existing roads, possibly heavy rail corridor expansion, and improvements to pedestrian and cycle facilities.

Traffic congestion is the number one factor to encourage motorists to use public transport (Brisbane City Council, 1995b; Queensland Transport, 1995). When road-building projects are undertaken to “relieve congestion”, they are only temporary measures destined to result in (1) more people become dependent on automobile transport, (2) additional traffic (and air pollution) being induced, and (3) equal if not worse levels of congestion in another 3-10 years.

In fact, current levels of traffic congestion in Brisbane are hardly bad enough to encourage widespread use of public transport, except at peak travel times. According to Brisbane City Council’s State of the Environment Report 1999, average peak-hour arterial speeds in

Brisbane are actually higher now (33kph) than they were five years ago (32kph). In these conditions, any congestion relief measures such as road-building will spell the death of public transport demand in SE Queensland.

Managing Travel Demand. The only way to actually relieve traffic congestion is by leading people to more efficient travel habits. This is called Travel Demand Management (TDM). The IRTP identifies several very effective ways of discouraging motor vehicle use through TDM:

- *well-researched public campaigns of public education and promotion of alternative modes;*
- *priority to higher efficiency passenger vehicles around the road network as discussed in the public transport and road chapters of this IRTP;*
- *facilitating ride-sharing schemes (including car-pooling and van-pooling);*
- *encouraging businesses and households to reduce trips to avoid unnecessary travel;*
- *using technology and supporting more flexible operating hours for shopping and employment to share the load better and make best use of available transport system capacity;*
- *managing access to, and operations along, major roads with measures such as ramp metering;*
- *rationalised parking policy to discourage all day commuter parking in centres and ensure that parking is not easier and cheaper than using public transport; and*
- *considering charges for using roads on a pay-as-you-go basis, so the cost of each trip becomes more obvious. (IRTP, p.52)*

TDM trials in Perth, Adelaide and Brisbane have reduced “vehicle kilometres travelled” (vkt) by 10%, 22% and 49% respectively (James and Brög, 1998; Ampt, 1998; Engwicht, 1995). With serious financial commitment and investment, a large-scale, city-wide Travel Demand Management program would remove the perceived need for more road space while simultaneously promoting public transport, cycling and walking.

Queensland Transport must begin to invest in the relatively inexpensive TDM measures listed in the IRTP (above) instead of infrastructure projects that will be unnecessary after successful a TDM program.

Considering Wider Social Benefits and Costs. The IRTP contains the following Key Action (11.9, p. 145):

Develop a best practice method which incorporates the wider social benefits and costs of public transport in transport investment decisions.

Lead Agency – QT, Supporting – MR, Start - 97/98 Duration - 3 years

We have not seen any evidence of the incorporation of wider social benefits and costs into transport project assessment in SE Queensland. Considering the staggering social, environmental, health, economic and amenity costs of motor vehicle use in SE Queensland, the incorporation of these costs into transport investment decisions would not only lead the state government to invest part of its health, environment, state development, family, youth, social welfare and education budgets into essential public transport improvements, but more

importantly would also make many road-transport-based projects clearly unfeasible in SE Queensland.

The phrase “transport investment” is used, and yet we cannot find a few million dollars of the \$1 billion transport budget to provide the most basic of public transport necessities.

Queensland Transport is advised to implement IRTP Key Action 11.9 before the end of this year (2000), as originally intended, thereby developing a best practice method which incorporates the wider social benefits and costs of public transport in transport investment decisions.

Building Light Rail, Not Busways. Light rail is an urgent need for SEQ public transport. The current network proposed for Brisbane Light Rail is not anywhere near the scale necessary to consolidate our existing rail and bus networks into an integrated whole; eventually we will need to extend this initial light rail network to include the old tram lines removed in the 1970s, and beyond.

We refer the committee to the Public Works Committee Report No. 39 concerning the SE Transit Project, and to the QCC discussion paper on this project, available from www.powerup.com.au/~qccqld/smogbusters. Essentially, we agree with the Public Works Committee, and several experts submitting to that inquiry, that SET is an engineering solution to a problem that cannot be resolved through such infrastructure.

Planners claim that the busways will eventually be converted to light rail use. Unfortunately, the SE Busway has at least two points that prevent conversion to light rail; but more importantly, the point of light rail (and traditionally of buses as well) is to run them on existing roads where people want to catch them, rather than removing them to a location that is difficult for a large volume of passengers to access them such as the SE Freeway.

Extending Heavy Rail. Wherever possible, we need to extend our heavy rail network, the most efficient and environmentally-friendly form of public transport in existence.

The proposed (and possibly endangered) heavy rail link to the Brisbane Airport is an *essential* component of the SEQ public transport network, as it enables visitors to access the public transport network on arrival, and residents to reach this common destination without a car or taxi.

Ensuring Pedestrian Access. Some potential public transport users are prevented from reaching their nearest public transport access point by poor, inconvenient and unsafe pedestrian facilities. There are several key obstacles:

- high-volume, high-speed, four- to eight-lane arterial roads without frequent crossings
- smaller roads without crossings
- roads with a speed limit of 50km/h or higher
- crests and other obstructions to pedestrians’ or motorists’ vision
- crossings at traffic lights that can take up to five minutes for a pedestrian (2-3 individual waits)
- no ramp for wheelchairs to mount the kerb

Pedestrians must be given priority around any bus, train or ferry access point, including the following measures:

- speed limits of 40km/h or lower around bus stops
- zebra crossings wherever there are no traffic lights
- a guarantee that no pedestrian will wait more than one minute from the time they arrive at one side of the street to the time they arrive at the bus stop on the other side of a traffic light crossing

Upgrading Services at Stops and Stations. Another deterrent to public transport use is a perception that the wait at the bus stop, train station or ferry terminal will be unsafe, uncomfortable, unhealthy or ridiculously long. Many access points are unlighted, unsheltered, unstaffed, and sometimes located along the most polluted corridors in the region (often because of the high volume of diesel buses on the route). In addition, passengers do not know how long they will have to wait at the stop because (1) basic timetable information is often unavailable, and (2) buses in particular often run late or early because of poorly estimated timetables.

In order to inspire a feeling of comfort and security at public transport access points, we recommend:

- every public transport access point be equipped with basic timetable information;
- all train stations and major bus stops (at least every second or third stop) be provided with shelter that blocks out the sun at all times of the day but leaves visibility for approaching buses and trains;
- arrival times be made more reliable through timetable auditing;
- frequency of services be increased;
- buses be converted to compressed natural gas (CNG) or other cleaner fuel alternative to diesel; and
- staff be reintroduced at train stations.

Consulting the Public. IRTP Key Action 14.2 is to “Convene a Regional Transport Reference Group (RTRG) to meet regularly with elected and appointed transport officials to provide input on current issues and ideas for improvement” (p.150). Since the dissolving of the RTRG by Queensland Transport in May 1999, community representatives have had no means of providing input on the many transport projects currently undergoing planning or construction. We see this as a deliberate attempt by Queensland Transport to undermine the consultative obligations developed in the IRTP.

In the absence of a consultation program approximating that described by the IRTP, all transport projects fall short of IRTP standards and goals. SE Queenslanders have no means to ensure that transport projects are meeting their needs, or even the guidelines of the IRTP.

The Regional Transport Reference Group (RTRG) must be reinstated immediately, before any further transport planning or construction is initiated.

5. Integration of Bicycles and Public Transport

This detailed section seeks to illustrate:

- A. the importance of integrating bicycles and public transport;
- B. existing integration of bicycles and public transport; and
- C. measures to improve integration of bicycles and public transport.

A. The Importance of Integrating Bicycles and Public Transport

The IRTP for SEQ aims to increase the proportion of trips by public transport to 10.5%. However it also seeks to increase the proportion of trips by bicycle to 8 % by 2011. In order to achieve either target, it is essential that these modes do not compete with each other – rather that they complement each other.

Evidence from interstate and overseas demonstrates that where bicycle trips can be easily integrated with longer public transport trips, this creates a transport option that attracts people out of their private motor vehicles. The possibilities for integrating these two modes include:

- Bicycles on buses;
- Bicycles on heavy rail;
- Bicycles on light rail;
- Bicycles on ferries;
- Bicycles in bus lanes/busways;
- Bicycle parking equipment and facilities; and
- Access improvements to public transport stops.

It is when these modes are effectively and efficiently integrated that they enhance the potential of both modes of transport. Over short distances the bicycle provides an effective and efficient mode of transport; however as distances increase people often depend on the car. On the other hand, public transport offers faster passenger travel over longer distances. At short distances, however, it is slower and does not offer access close to individual residences. For this reason, the distances and modes are complementary.

The additional benefits gained from integration of bicycles and public transport are:

- the ability for cyclists to make longer trips that they would not usually be able to make by bicycle alone;
- a significant increase in the potential destinations available to cyclists;
- an extension of the catchment area of public transport stations;
- an increase in public transport patronage; and
- improved access for not only cyclists, but for other wheeled users such as pedestrians with mobility aides, wheelchairs and parents with prams.

It is imperative that measures to increase the quality of cycling and public transport does not attract users away from one mode to the other, but attracts the private car user to these modes. Therefore, initiatives are necessary to restrain car use at the same time.

B. Existing Integration of Bicycles and Public Transport

Currently, there is limited integration of bicycles with public transport in SE Queensland. The situation can be summarised as follows:

Buses and Bicycles

There is no capacity to carry bikes on local commuter bus services. Only longer distance bus services will carry bicycles on buses, but for a percentage of the fare, and only if there is luggage capacity.

There is no formal provision for bike parking or other end-of-trip facilities at bus stops.

Bicycles are able to legally travel in bus and transit lanes. However, except where there are wider kerb-side lanes, there is no provision to make bus and transit lanes safe and convenient routes for cyclists.

Heavy Rail and Bicycles

Bicycles can be carried on CityTrain services in Brisbane and to the Sunshine Coast and Gold Coast except during peak times in the direction of peak flow.

A number of train stations on the CityTrain network have bicycle lockers. According to the Cycle South East strategy (QT, 1999a), there are over 1400 lockers currently installed, and these are essentially used to capacity, pointing to a need for many more to be installed.

TravelTrain (long distance) services in Queensland will carry a limited number of bicycles with pre-booking, costing an additional 20% of the adult fare. However, certain TravelTrains carry restrictions, such as the Tilt Train which does not have bicycle accommodation, and other trains which have restrictions on particular days.

Light Rail and Bicycles

Brisbane Light Rail is still in the planning stages.

Ferries and Bicycles

Bicycles can be carried on City Cat services without restriction. However, there is no dedicated provision for accommodating bicycles whilst travelling on the ferry.

Other cross-river ferry services carry bicycles for a fare.

There are no secure bicycle parking facilities at ferry terminals.

C. Measures to Improve Integration of Bicycles and Public Transport

Buses and Bicycles

Carrying bicycles on buses:

There is ample potential to trial bikes on buses using best practice methods from overseas. This will require negotiation with bus operators. This research is a priority action of the Cycle South East strategy and should be implemented as soon as possible. Methods that could be used include:

- bike trailers pulled along by buses;
- rear-mounted racks;
- front-mounted racks; and
- removal of seats or use of folding seats to allow bikes (as well as wheelchairs) to be carried on board.

It is preferable that interchange between modes be as easy as possible. This includes:

- providing at-level access to buses;
- indication of boarding point for cyclists; and
- avoiding difficult entrance to buses, for example ‘up steps’.

Experience in other places:

Many overseas cities have instituted a number of programs to integrate bicycles and public transport. Research conducted by members of the Transportation Research Board showed that 13 of the 21 Transit agencies surveyed had implemented Bicycle-Bus Programs. One such agency was Tri-Met in Phoenix. During 1991 Phoenix began a six-month bike-on-bus demonstration program with 45 rack-equipped buses. During the demonstration program, 5,500 bicycle riders used buses and ridership continually increased. Due to its success in attracting increasing numbers of bicyclists to incorporate cycle trips with buses, the program expanded to 350 equipped buses. (See Transportation Research Board, National Research Council (1994) for further information).

Bicycle parking at bus stops:

Secure, sheltered and high-quality bicycle parking facilities must be provided at bus stops, especially major interchanges. Lockers are the preferred bicycle parking facility at major bus centres, while adequate bicycle parking such as the inverted ‘u’ stands (“Sheffield” racks) must be provided at other bus stops. Short- and long-term options should be available to serve both occasional and regular commuters.

Currently in Queensland, bicycles can be observed at many bus stops secured to objects such as posts, trees, signs and seats. This is a clear indication that demand for bicycle parking facilities exists.

Overall, the cost of providing ‘bike and ride’ facilities are significantly lower than ‘park and ride’ facilities, estimating around \$50-500 and \$2,000-10,000 per space, respectively. In addition, bike lockers cost around \$1,000 for two-bike capacity, and one car parking space could be used for eight bike lockers.

Experience in other places:

There are many examples of inexpensive, high-quality, well-used bicycle parking facilities overseas and within Australia that operate on a cost-recovery basis. Bay Area Rapid Transit (BART) in the San Francisco region of California is one such example. BART began funding bicycle parking facilities from the start in 1972 by providing coin-operated bicycle lockers. Over the years BART has installed 600 lockers and 1,368 bicycle racks at suburban and urban rail stations. Lockers were rented at a cost of \$15 for a 3-month period or \$30 per year. The lockers at BART stations have almost reached capacity and there are locker waiting lists at certain stations. Officials are pushing to increase the number of bicycle parking facilities by obtaining additional funding. BART receives high levels of usage by actively promoting their bicycle parking facilities in brochures and through electronic messages on station destination signs (Replogle and Parcels, 1992: p31).

In addition, research in the Netherlands has determined that a sufficient amount of safe bicycle parking facilities has contributed to an increase in bicycle trips to the intercity bus lines in the Netherlands (de Leeuw and Weijers, 1999).

Bicycles alongside buses:

Bus and transit lanes offer relatively safe routes for cyclists on roads rather than cycling adjacent to high volume traffic lanes. Shared use of the carriageway between cyclists and buses can create a number of conflicts if there is not sufficient room for buses to pass within the same lane. Buses often do not acknowledge cyclists' right to be in the carriageway and can 'squeeze' cyclists between the gutter and the bus. Bus lanes need to provide signage identifying cyclists' right to use these lanes, as well as bicycle symbols painted on the road.

It is often perceived that bicycles hold up buses. However, bicycles can travel at a similar average speed to buses considering that buses stop and start regularly. This can create a 'leap-frogging' situation where the cyclist overtakes the bus each time it stops, and the bus must pass the cyclist each time it starts up again. For this reason, appropriate lane widths should be provided to allow buses to safely overtake bicycles; or a bicycle lane should be incorporated into the carriageway where there is sufficient room. It is imperative that bikes are not excluded from bus/transit lanes, especially those in the kerb-side lane. This exclusion would force cyclists to travel a dangerous route between high-volume general traffic lanes on one side and heavy vehicles in the bus lane on the other. This intimidating and unsafe situation would discourage people from cycling, and would cause bus drivers additional confusion and delay as well.

Busways are another form of carriageway that offer relatively safe routes to cyclists. These direct, low volume routes through inner city traffic would provide cyclists with an alternative to the dangerous arterial roads that currently deter many people from taking up cycling. Busways should be recognised as an indispensable part of SEQ's cycle network, offering cycle commuters direct, safe and convenient routes.

The SET Project was designed with both a busway and a bikeway. Though its cost is a mere fraction of the total cost of the SET Project, the bikeway portion has been put off indefinitely, while bicycles are likely to be excluded from the busway itself.

Wherever new bus/transit lanes and dedicated busways are created in the future, these must make provision for bicycles. This is already the case in New South Wales.

Heavy Rail and Bicycles

Bicycles on heavy rail:

Current restrictions mean there is limited capacity to attract cyclists to combine cycle trips and train travel because the majority of trips are performed within these peak periods, including trips to work and to school. Surveys have shown that people are apprehensive about leaving their bikes at train stations owing to the lack of secure storage, theft and vandalism (Edgar, 1994). Therefore, relaxing current restrictions would significantly increase the potential opportunities for integrating cycle trips with trains.

Interior carriage design also needs to be improved to accommodate space for wheeled users including bicycles, wheelchairs and prams.

Experience in other places:

The provision of bikes on rail has been implemented by a number of transit agencies in Australia and overseas. Bay Area Rapid Transit (BART) in San Francisco provides a world's best practice bikes-on-rail program that started in 1962. By 1980 BART had issued 9,000 bike-on-rail permits, and with continuing community support and relaxed restrictions on bike-on-rail services over the years, by 1992 there were 71,000 permits (Replogle and Parcels, 1992: p42).

In addition, 6 of the 21 transit agencies surveyed have instituted bicycle-rail programs, which shows increasing usage of bikes on trains through various transport practices, such as regulations, fees and permits. (For further information, see Transportation Research Board, 1994).

Bicycle parking at train stations:

It is acknowledged that there are over 1,400 lockers at train stations throughout the CityTrain network; yet train stations in Queensland rarely provide simple, but secure bike racks for short-term parking. Additional sheltered bike lockers or other secure form of bike parking is required at all train stations, especially those with high demand. Promotion of bicycle lockers at train stations is also necessary in order to attract cyclists to 'bike and ride'.

(Refer to additional information below on the type of bicycle parking required at stops, the location of bicycle parking facilities and bicycle access to public transport).

Experience in other places:

There are numerous examples in the Netherlands of high-quality bicycle parking facilities resulting in relatively high train travel access using 'bike and ride' facilities. All railway stations have at least some bicycle parking facilities, including secured (lockers and stands) and/or unsecured (guarded) bicycle parking. Some 45% of all access trips to the train are made by bicycle, as well as 14% of the departure trips. Therefore over two-thirds of the bicycles are parked at the train station. This figure is owing to the sufficient amount of safe bicycle parking facilities and the strong support for cycling in the Netherlands (Godefrooij, 1996). Japan has a similarly high level of bicycle access to train stations.

In addition, research carried out by the Technical University of Delft showed that bicycle parking facility improvements near railway stations would result in a significant increase in the number of people travelling by train (de Leeuw and Weijers, 1999).

Light Rail and Bicycles*Bicycles on light rail:*

Light rail transport does not exist at present in Queensland; nevertheless it important to consider this mode since light rail planning and development is currently occurring. It is essential that bikes are permitted to be carried on light rail or attached to the carriage, and that adequate bike facilities are provided at light rail stops. Options include:

- bike trailers pulled along by light rail or rear/front mounted racks;
- removal of seats/use of folding seats to allow bikes to be carried on board and thus improving wheelchair access.
- providing at-level access to light rail;

- indication of boarding point for cyclists;
- avoiding difficult entrance to light rail, for example ‘up steps’;
- provision of secure, sheltered and high-quality bike parking facilities (i.e. lockers/racks) close to light rail stops.

Please also refer to information on the type of bicycle parking required at stops, the location of bicycle parking facilities and bicycle access to public transport.

Bicycles alongside light rail:

It will also be imperative to cater for bicycles along the light rail route, especially since Brisbane’s inner-city bicycle network shares many roads with the proposed light rail route. Bicycle lanes alongside light rail tracks are a vital element of the light rail network along with appropriate bicycle manoeuvre management (i.e. ability to cross light rail tracks when turning) and signage.

Ferries and Bicycles

Bicycles on ferries:

Provision of secure, sheltered bicycle lockers/racks are required at ferry terminals. There are areas of high demand for such facilities in SEQ already. For example, the ferry services from the University of Queensland’s St Lucia Campus to West End and to Dutton Park are lacking such facilities for ‘bike and ride’ opportunities. In addition, entrance to ferries should be adequate to enable bicycles to be easily carried on (i.e. width of entrance), stored on board easily and in a way that does not inconvenience other passengers.

(Please also refer to information below on the location of bicycle parking facilities and bicycle access to public transport.)

Examples from other places:

Ferries, compared with other public transport options, have not been as heavily used by cyclists. However, there are good examples of integration of bicycles and ferries in Brisbane and overseas. Bicycle-ferry programs have been implemented by a number of transit agencies in America. Three out of the 21 agencies surveyed by the Transportation Research Board in America operate bicycle-ferry programs. Given the limited application for ferries generally, this shows strong support for integrating bicycles with ferries. (See Transportation Research Board, 1994.)

Location of Bicycle Parking Facilities

In order to attract cyclists to incorporate cycle trips with public transport, bicycle parking facilities must be located in a way that is convenient for the cyclist and has a high level of security. Bicycle parking facilities must be:

- located within view of staff and passers-by or covered by video cameras;
- easily accessible;
- well-lighted;
- close to public transport interchange;
- kept free of graffiti; and
- well-maintained.

Bicycle Access to Public Transport

A vital improvement to SEQ public transport services would be the encouragement of cycling to public transport through both on- and off-road access. Access to public transport should be designed to meet disabled access standards to allow all wheeled users to easily access public transport nodes and to access their destinations at the end of their trip. These routes must be:

- well-signed
- well-lighted;
- well-maintained; and
- direct, safe networks linking to surrounding areas.

It is evident that improving the integration of bicycles and public transport does increase the number both cycle trips and public transport trips. In order to effectively and efficiently unify these modes it is imperative that transit agencies incorporate bicycle-transit programs into transit operations.

Ongoing monitoring of the integration of bicycles and all forms of public transport is essential. For example, monitoring of both use and capacity of bicycle parking facilities is needed to ensure that the supply of bicycle parking facilities meets the demand. Trials of programs such as bikes on trains at all hours, or bikes on particular bus routes, need to be carried out and evaluated so that improvements can be made and their effect on transit ridership determined.

6. Conclusion

In summary, the Queensland Conservation Council feels that public transport in South East Queensland is suffering from:

- an undue focus of energy and spending on infrastructure projects;
- far too much transport expenditure on additional road space for private motor vehicles; and
- neglect of easy, affordable public transport measures that have the capacity to attract additional users to public transport immediately.

Once again, thank you for the opportunity to draw attention to areas of the SEQ public transport network needing urgent reassessment. We trust the information provided is of assistance to the Travelsafe Committee.

The Queensland Conservation Council would be happy to appear before the committee. Please contact Eric Manners or James Whelan on (07) 3221 0188.

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