



Economic & Public Policy

TransApex Road Tunnels

Introduction

TransApex is a proposed network of five tolled road tunnels, including three river crossings, linking inner-suburbs of Brisbane. The purpose of *TransApex* is to alleviate Brisbane's inexorably worsening traffic congestion.

TransApex was the centrepiece of a transport policy promoted by successful Liberal Lord Mayoral candidate, Campbell Newman, during the campaign for the Brisbane City Council election held on 27 March 2004. It is widely acknowledged that the election result was strongly influenced by this bold plan to respond to widespread frustration regarding worsening traffic congestion and perceived inaction by all levels of government.

This document summarises information available regarding the *TransApex* network, and compares it with alternative anti-congestion strategies.

Background

In 1999, Tom Richman proposed a package of seven cross-river tunnels in Brisbane, two of which would link with a southern ring road. The links would have provided by-pass road capacity to help alleviate traffic congestion.¹

In June 2000, Brisbane City Council (BCC or Council) initiated an investigation of ways of solving Brisbane's transport problems. Enterprises were invited to formulate ideas. Suggestions included ring-roads, by-passes and tunnels. Several proposals received further consideration. A tunnel connecting the South-East Freeway and Ipswich Road with the Inner City By-Pass was allocated the highest priority. A pre-feasibility study was positive.

Further analyses of the tunnel followed, including investigation of financing issues and options. These continued into 2003.

The tunnel was included in the former Labor Council's *Draft Transport Plan for Brisbane 2002-2016* released in September 2002. The project, referred to as the North-South By-Pass Stage 1, was to link the South-East Freeway and Ipswich Road in the Woolloongabba area with the Inner City By-Pass at Bowen Hills, passing under

¹ Richman, Tom, "Tunnel Vision: The Many Benefits of an Under River Transport Strategy", *King's Counsel* (Newsletter of King & Co. Property Consultants), Issue 12, Autumn, 1999, pp. 1, 3, 5-6, 20.

Kangaroo Point, the Brisbane River and Fortitude Valley. The proposed completion date was 2008. The estimated cost was \$900 million to \$1,200 million.

The Stage 2 extension was to link the Inner City By-Pass and Gympie and Stafford Roads by 2008 at an estimated cost of \$750 million to \$850 million. A further \$300 million to \$400 million was required for Stage 3 to connect Stage 2 with the East-West Arterial, providing access to the Gateway Motorway and the airport.

Two lanes were to be provided in each direction. Users were to pay tolls.

On completion of the tunnel, some lanes on other roads, such as Story Bridge, Main Street, Shafston Avenue and Lutwyche Road were to be reserved for buses and other high occupancy vehicles.

In late-February 2003, the Labor Council commenced a campaign to promote the North-South By-Pass tunnel. It included delivery of red cards to all Brisbane households proclaiming, "The answer to easing congestion is BORING."

The Lord Mayor, Jim Soorley, reported that experts commissioned by BCC in late 2002 to investigate engineering and financial aspects of Stage 1 had advised the project would be viable with a toll of \$3.30 each way.

The *Transport Plan for Brisbane 2002-2016*, released in September 2003, deferred the expected completion dates of Stages 1, 2 and 3 of the North-South By-Pass tunnel to 2009, 2012 and 2015, respectively. Cost estimates remained unchanged.

Liberal Lord Mayoral candidate Campbell Newman proposed more tunnels to tackle congestion. The proposal was subsequently detailed and labelled *TransApex* in the Liberal Party's transport policy, *Moving Brisbane*, released in May 2003 for the March 2004 Brisbane City Council election.

Moving Brisbane depicted *TransApex* as a network of five tolled road tunnels, including three river crossings, linking inner-suburbs of Brisbane. One tunnel, the North/South Distributor, was very similar to Labor's North-South By-Pass Stage 1.

Moving Brisbane nominated two stages of *TransApex*:

1. "a 10-year, \$3.2 billion plan to build four...tunnels" labelled East/West Distributor, North/South Distributor, Northern Link, Hale Street/South Brisbane Connection, and Kingsford Smith Drive Duplication; and
2. "a long-term, \$800 million plan to build a tunnel" described as Kingsford Smith Drive Duplication.

An extract from *Moving Brisbane* indicating the location of the *TransApex* tunnels is at Appendix A.

The estimated \$4,000 million cost of *TransApex* was to be funded by tolls at a rate of \$2 (including GST) per vehicle per "segment link".

During the Council election campaign, Campbell Newman said that he expected substantial contributions from the Commonwealth and Queensland Governments, which would hold down tolls required for commercially viable *TransApex* tunnels.

In 2003, BCC decided to commence a detailed feasibility study of the North-South By-Pass Stage 1. Queensland Government endorsed this decision late in the year.

Current BCC Policy

On 27 March 2004, voters elected Campbell Newman as Lord Mayor, but installed a majority of Labor Councillors. The Labor majority acknowledged the strong influence of transport policy on the vote for Lord Mayor. Consequently, they agreed to allocate the transport portfolio to Liberal Councillor, Graham Quirk.

A detailed assessment of *TransApex* and potential variations was initiated. The scope of the detailed feasibility study on Stage 1 of the North-South By-Pass was adjusted to include the Liberal variant, the North/South Distributor. The new merged concept was labelled the North-South By-Pass.

BCC's 2004-05 budget provided \$2.9 million for *TransApex* assessments and \$23.4 million for detailed studies and pre-construction work on the North-South By-Pass.

Because of cost and technical issues, the *TransApex* assessments have been expanded to consider a bridge alternative to a tunnel between Hale Street/Inner City By-Pass and Merivale and Cordelia Streets. It could cut the cost from \$500-600 million to \$100-150 million, according to the Lord Mayor (*The Courier-Mail*, 29 August 2004).

The *TransApex* assessments are investigating Labor's North-South By-Pass Stages 2 and 3 as an alternative to the Kingsford-Smith Drive Duplication tunnel in the original *TransApex* proposal. Both alternatives have been labelled the Airport Link.

Throughout 2004, Crs Newman and Quirk promoted the evolving *TransApex* network as completing an inner-ring-road system for Brisbane. It is depicted that way in the map at Appendix B, which was displayed by Transport and Major Projects Committee Chairman, Cr Quirk, at a BCC Accessible City Advisory Committee meeting on 13 December 2004.

At the same meeting, Cr Quirk, advised that the Council had reverted to Labor's plan to reserve lanes for buses or high occupancy vehicles on existing roads, such as Story Bridge when the North-South By-Pass "frees up" capacity on those existing roads.

Crs Newman and Quirk no longer suggest that *TransApex* tolls will be \$2 per vehicle per "segment link". Tolls could be substantially higher because of higher costs of construction and smaller (if any) contributions from Commonwealth and Queensland Governments than initially anticipated.

Cr Quirk advised at the December 2004 Accessible City Advisory Committee meeting that the Lord Mayor preferred tolls on new facilities to congestion charges whenever and wherever congestion is a problem in the road network.

The pre-feasibility study of the *TransApex* tunnel network is scheduled to be presented to Council in early 2005.

BCC is awaiting a decision from the Queensland Government regarding a Council-approved “business case” (part of the detailed feasibility study in progress) recommending a \$1,300 million North-South By-Pass tunnel to be delivered as a public-private partnership (PPP) under a BOOT (build-own-operate-transfer) model with toll revenues “shared” between the Council and the selected partner and full ownership reverting to the Council in 30 to 35 years.

Queensland Government Policy

The Queensland Premier advised on 17 December 2004 that the Government’s evaluation of the North-South By-Pass “business case” would be completed in February 2005.

The Queensland Government has not yet indicated whether or not it will approve tolls on the North-South By-Pass tunnel or any other tunnel in the *TransApex* network.

The Queensland Government has not yet advised its position on PPP toll-roads. For some time, the Government has been considering a PPP toll-road among other options for providing the Gateway Bridge duplication, but has not yet announced a decision.

So far, there has been no indication of any Queensland Government financial support for the North-South By-Pass tunnel or any other part of *TransApex*.

Early in 2003, former Queensland Minister for Transport and Main Roads, Steve Bredhauer, expressed concerns in Parliament about the viability of the North-South By-Pass toll-tunnel without substantial capital contributions by the Queensland Government and Council, and without measures to force traffic off Story Bridge and into the toll-tunnel.

Late in 2003, the Queensland Government gave approval to the council to proceed to a detailed feasibility study.

Commonwealth Government Policy

The Commonwealth Government did not provide funds for *TransApex* in the five-year funding package announced on 7 June 2004 in conjunction with the *AusLink* land transport policy. Subsequent efforts to obtain a Commonwealth contribution of \$400 million over 15 years were unsuccessful.

This was consistent with a key principle of *AusLink* that urban traffic congestion is a state and local government responsibility, not a federal government problem.

However, the coalition parties’ 2004 federal election transport policy document, *Building Our National Transport Future*, released on 15 September 2004, promised:

- “A \$2 million contribution over the next two years to the pre-feasibility study for the first stage of the Brisbane *TransApex* tunnel project”; and
- “A re-elected Coalition Government will consider further contributions to the project under the *AusLink White Paper* evaluation arrangements, once the pre-feasibility study is complete.”

RACQ Analysis

More Road and River Crossing Capacity Important for Congestion-Alleviation

TransApex consists of a mixture of new by-pass/ring-road and radial road capacity, including three river crossings. Its construction would provide a desirable, substantial increase in the capacity of Brisbane’s inner-suburban road network.

The philosophy underpinning *TransApex* differs markedly from the view underlying Queensland Government’s transport policy for Brisbane. The latter has been strongly influenced by the argument that adding arterial road capacity, particularly radial capacity, in Brisbane is futile and self-defeating because extra capacity will “induce” additional demand and the roads will quickly become congested again.

Proponents of this argument avoid some important issues.

- Benefits provided by additional capacity are ignored.
- They do not understand the distinction between redistribution or diversion of pre-existing travel movements within an area in the short term, and increases in travel demand in the area in the long-term, such as those arising from attraction of people and businesses to the area. Only the latter can properly be described as “induced demand” and only the latter could conceivably lead to network congestion as bad or worse than before the addition to road capacity.
- Recent research by Robert Cervero, Professor of City and Regional Planning at the University of California, Berkeley, found that 6-8 years after freeway expansion around 20 per cent of the added capacity had been preserved, around 40 per cent had been absorbed by traffic growth arising from population and income growth, about 31 per cent had been taken-up as a result of behavioural shifts, and 9 per cent because of land-use shifts. In other words, the argument that road capacity increases are futile and self-defeating is a gross exaggeration, even without any pricing of access.
- Proponents of the argument that adding road capacity is futile simply ignore the role that pricing can play efficiently rationing access to congested roads and thereby offsetting redistribution and growth of travel movements following additions to road capacity. A properly designed congestion-pricing regime would ensure that capital allocated to increasing urban arterial road

capacity to alleviate congestion, and other resources associated with road travel are used efficiently, rather than being a futile or wasted.²

By-Pass and Ring-Road System

A comprehensive ring-road/by-pass road system, including river crossings, is a critically important component of package to successfully deal with Brisbane's worsening traffic congestion problems. Such a system would provide alternatives for about 43 per cent of peak-period traffic on radial roads to or from the cbd that is going to or coming from somewhere else, respectively.

The Council's transport policy recognises this important point and is a step in the right direction. Unfortunately, it falls far short of proposing a comprehensive ring-road/by-pass road system.

Claims by the Lord Mayor and the Transport and Major Projects Committee Chairman that *TransApex* would provide Brisbane with an inner ring-road system are misleading. Part of the so-called inner-ring would actually be radial capacity carrying traffic part of the way to and from the cbd. The Northern Link connecting the Western Freeway and Inner City By-Pass would certainly have a radial function.

Suggestions by the previous Council that the North-South By-Pass would complete an inner-ring road system also comprising the Inner City By-Pass and Riverside Expressway were similarly misleading. Clearly, the Riverside Expressway has a radial function as well as a by-pass role.

TransApex does not include proposals regarding an intermediate ring-road system for Brisbane, although the East/West Distributor tunnel could form part of an intermediate ring-road. That can be deduced by perusing the *TransApex* Project Overview map at Appendix B.

The Liberal *Moving Brisbane* transport policy supports a state-built Western By-Pass, which would complete an outer ring-ring system for Brisbane. However, the policy proposes it be located outside of Brisbane. The Lord Mayor has suggested it be routed west of the D'Aguilar Range.

This remote location of the Western By-Pass would exclude a connection with the Logan Motorway. Therefore, it would not complete an outer ring-road system for Brisbane. Also, the remote location would greatly limit the effectiveness of the by-pass as:

- an alternative to congested radial roads to the cbd;
- a congestion alleviator in the western suburbs; and
- an access/distributor road to and from the north, north-west and south-west of Brisbane.

² For a more detailed discussion of the "induced demand" issue and the role of congestion pricing in managing it, see Downs, Anthony, *Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*, Washington, DC: Brookings Institution, 2004, particularly pp. 82-87 and 103-107; Cervero, Robert, "Are Induced-Travel Studies Inducing Bad Investments?", *Access*, No. 22, Spring 2003, pp 22-27.

Tunnels Vs Surface Facilities

TransApex's tunnels will partly overcome aesthetic, noise and “nimby” issues problem associated with surface roads and bridges, as well as allowing retention of the land surface for other uses. But, tunnels concentrate pollution impacts and are much more expensive, perhaps 5-6 times more costly to build, and even more expensive to maintain.

The higher cost of tunnels means much less capacity can be provided for the same money or higher tolls have to be applied than for the same length of road or bridge.

Roads Feeding TransApex

BCC transport policy does not include plans to upgrade roads feeding the *TransApex* facilities. For example roads such as Gympie Road/Lutwyche Road/Bowen Bridge Road, Shafston Avenue/Lytton Road/Wynnum Road, Main Street/Ipswich Road, South-East Freeway and Stanley Street, which will feed the North-South By-Pass will remain hopelessly inadequate for the traffic volumes they are required to carry. Main Street/Ipswich Road could carry the double burden of the North-South By-Pass at one end and an upgraded six-lane Ipswich Motorway at the other end.

The system-wide effects of the partial upgrading of inner-suburban capacity via *TransApex* and ongoing neglect of middle-suburban infrastructure is problematical.

Tolls

BCC proposes tolls on *TransApex* tunnels to fund their construction and operation. Tolls are designed to cover costs of new facilities, including an attractive rate of return on investment. Tolls typically vary with vehicle-type, but not traffic volume.

The intention to apply tolls appears to be based on four factors.

First, the Commonwealth Government will not accept responsibility for urban congestion. The Commonwealth's *AusLink White Paper* tells state and local governments wanting more congestion-alleviating road capacity to fund it from their own resources, charge tolls or let private sector road-providers do so.

Second, the Queensland Government won't fund more arterial road capacity to major activity centres because it has been misled by the argument that it is futile.

Third, toll-roads allow reallocation of Queensland Government and BCC funds from roads to heavy public transport subsidies. Both governments have mistakenly adopted heavy subsidies for public transport as a key anti-congestion strategy.

Fourth, Councillors do not want to raise rates or cut other expenditure programs.

Building new toll-roads to alleviate congestion on the existing road system is seriously flawed policy. It appears that no level of government has adequately considered the equity and economic efficiency implications of this policy.

Tolls could be considered inequitable for multiple reasons. Various motoring taxes already cover the full costs of road-provision, and external costs of road-use, such as congestion.³ Tolls favour rich road-users. Tolls are extra imposts on motorists not fortunate to be able to drive in areas with adequate existing road infrastructure. So, tolls discriminate on the basis of geography and history. A significant ethical objection is that tolls apply to drivers who reduce costs on others by avoiding existing busy roads, and are dodged by those who stay on existing busy roads, adding to congestion and thereby imposing costs on others.

These equity/ethical objections to tolls could not be easily resolved.

Tolls discourage efficient use of resources. This occurs at peak and off-peak times.

A toll on a new road encourages drivers to stay on existing congested roads. So, the toll undermines the congestion-alleviating potential and efficiency of use of the new road. The higher is the toll, the greater is the consequent community welfare loss.

As vehicle numbers grow, with population, economic activity and incomes, the toll helps forestall emerging congestion on the toll-road. However, it simply shifts the problem to other locations, exacerbating congestion elsewhere.

A recent study of New York's tolled and un-tolled river crossings found that traffic grew 5 times faster on the un-tolled river-crossings, and therefore, congestion worsened dramatically at the ends of those un-tolled facilities.

BCC plans to change general traffic lanes to bus lanes on Story Bridge when the North-South By-Pass tunnel is completed. This means the toll will shift congestion onto a facility with reduced capacity. The combination of the toll and reallocation of existing road space will exacerbate congestion elsewhere.

At off-peak times, when the social cost of an additional vehicle using a road/tunnel/bridge is zero, a toll will induce some drivers to choose a less convenient alternative. The efficiency of use of the road is thereby reduced. The higher is the toll, the greater is the resulting welfare loss to the community.

Nearly 50 years ago, Nobel Laureate William Vickrey explained that applying tolls to roads built to alleviate congestion, while allowing free access to congested roads, was an "outstanding absurdity".⁴ It still is! Vickrey recommended charges apply only at congested locations in the road system, and application of the revenue to facilities providing alternatives to congested roads.

Congestion Charges

BCC and the Queensland Government politicians prefer to impose tolls on new facilities than apply congestion charges to manage demand on crowded arterial roads

³ Cox, John, *Refocusing Road Reform*, Melbourne: Business Council of Australia, 1994, p. 150; Pender, Howard, *Taxing Cars: Fleecing the Fleet or Subsidising Smog?*, Sydney: Australian Tax Research Foundation, 1999, p. 48.

⁴ Vickrey, William, "Some Implications of Marginal Cost Pricing for Public Utilities", *The American Economic Review, Papers and Proceedings*, Vol. 45, No. 2, May 1955, p. 619.

and fund an alternative network of free-access ring-roads in Brisbane's outer, middle and inner suburbs. They have chosen a much less efficient and equitable option.

Congestion charges would only where and when congestion occurs in the urban road system. They would range from zero in free-flow conditions and vary with the degree of congestion. Congestion charges would vary between locations and times according to differences in congestion.

Properly designed congestion charges improve the efficiency of resource-use by making drivers bear congestion costs they impose on others, inducing them to alter their behaviour accordingly. This encourages changes in travel times, routes and modes and re-consideration of workplace and residential locations.

The better the alternatives to crowded roads, such as free-access by-pass and ring-roads and quality public transport, the greater is the reduction of congestion and the smaller the revenue-take. Poorer alternatives mean higher revenues, which can be used to improve available alternatives.

Congestion charges cut delays, fuel-use, vehicle emissions and crash risks. They facilitate better road system investments and use.

Congestion charges effectively manage so called "induced demand" from new roads in congested areas, fear of which has induced the Queensland Government to eschew provision of additional road capacity to major activity centres in Brisbane and other parts of south-east Queensland.

Congestion charges trigger and perpetuate a cycle of higher demand for public transport, improving public transport services and viability, and further increases in demand for public transport. This yields savings in public transport subsidies.

These savings and revenue from congestion charges facilitate further economic gains. Investments can be made in ring-roads, by-passes and public transport facilities with high benefit/cost ratios. Also, cuts could be made to taxes, like federal fuel and income taxes, which adversely affect the efficiency of use of resources.

Such uses of the proceeds should also nullify concerns about equity and political acceptability of congestion charges.

Also, federal involvement through tax cuts to offset congestion charges is justified by:

- national economic effects of high congestion costs in metropolitan areas; and
- Commonwealth dominance of taxation capacity.

There is a significant ethical issue reinforcing the strong case for congestion charges over tolls. Congestion charges apply to those imposing costs on others by using crowded roads, while tolls only charge drivers whose behaviour reduces congestion.

PPPs

Public Private Partnerships (PPPs) increase shortcomings of road-tolls, relative to congestion charges. Provision of PPP toll-roads is poor public policy.

Governments hope PPPs can shift risks to private groups. But, the major risks associated with design, construction and performance could be shifted to private groups through a contract covering those matters.

In any event, private entities will accept PPPs only if compensated for risk. So, they insist on agreements restricting anti-congestion activities by governments, because toll-road profitability depends on continuing congestion on competing parts of the road system. Consequently, risk-shifting by government means more congestion on other roads and higher tolls to improve expected returns to private investors.

PPP agreements impede transition to economically efficient congestion charges and infrastructure provision. The more PPP toll-roads there are in the network, the more difficult the transition. Typical PPP terms of 30 to 80 years create longstanding impediments to effective congestion-alleviation.

In summary, PPP toll-roads and efficient congestion-alleviation are incompatible.

If toll-roads were government-owned, congestion-alleviation could take precedence over high returns on capital, and future transition to efficient anti-congestion strategies could be facilitated.

Bus/HOV Lanes

BCC's intends to reserve lanes for buses or high occupancy vehicles (hovs) on existing roads, such as Story Bridge after the North-South By-Pass supposedly "frees up" road capacity on existing facilities.

But, growth of population, economic activity and incomes and the disincentive of a toll on the tunnel are likely to ensure there is no spare capacity on existing facilities in peak-periods.

To alleviate congestion, bus/hov lanes must induce more people to catch the bus than are diverted into remaining lanes or onto other crowded roads. Typically this does not happen. Congestion worsens and bus/hov lanes are underutilised. Resources are thereby wasted.

Congestion will not be alleviated by measures that demonstrably add to congestion.

RACQ Position

The key to efficient alleviation of traffic congestion in Brisbane is a package of complementary measures. There is no single remedy that is adequate by itself.

The package of measures recommended by RACQ comprises:

- a complete network of un-tolled outer, intermediate and inner ring-roads and by-pass roads to take through-traffic (over 40% of the total) off radial roads to major activity centres;

- selective increases in radial road capacity to major activity centres;
- congestion-pricing applying whenever and wherever roads are congested with charges varying with the degree of congestion;
- offsetting Commonwealth tax cuts;
- land zoning changes to -
 - allow substantial increases in residential and commercial densities around access points to major public transport corridors and major activity centres, and
 - require moderate increases in density in new land developments;
- a scaling down of public transport subsidies as congestion-pricing and zoning changes and consequential improvements in public transport services increase viability of the public transport system;

In formulating the package, RACQ focused on the social benefits and costs of various policy measures, and formulated alternatives to government policies that satisfy widely accepted economic efficiency and equity criteria, and are workable.

The role of the Commonwealth Government is critically important. Commonwealth tax cuts to make-room for congestion charges would make congestion charges politically acceptable. Also, those tax cuts, in conjunction with congestion charges applied by state and local governments would provide an effective transfer of resources from the Commonwealth to other governments to fund congestion-alleviating facilities to complement congestion charges.

The Commonwealth Government must not be allowed to avoid responsibility for serious metropolitan congestion problems because congestion is a national problem requiring a national solution.

Congestion chokes growth of economic activity in urban areas as well as traffic. Urban areas, particularly metropolitan areas, are major engines of economic activity and growth in the Australian economy. Therefore, congestion is a problem of national economic importance.

In addition, the Commonwealth controls the major tax bases, but state and local governments have a disproportionately large share of expenditure responsibilities (Australia's federal system is afflicted by vertical intergovernmental fiscal imbalance). Commonwealth tax cuts to make room for congestion charges would help to redress this imbalance.

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TransApex: Pre-Election



Stage One of *TransApex* is a 10-year, \$3.2 billion plan to build four strategically located tunnels:

1. **The East/West Distributor:** a 5.8-kilometre, four-lane tunnel (including a river tunnel) linking Logan Road and Old Cleveland Road at Stones Corner, the South East Freeway and Ipswich Road at Woolloongabba and the Western Freeway at Toowong.
2. **The North/South Distributor:** a 5.7-kilometre, four-lane tunnel running under Main Street and the Story Bridge, linking Ipswich Road, the South East Freeway, Logan Road and Old Cleveland Road with Bowen Bridge Road and the Inner City Bypass at Bowen Hills.
3. **The Northern Link:** a 3.6-kilometre, four-lane tunnel connecting the Western Freeway with the Hale Street Inner City Bypass route. This tunnel will also serve as a link between the East/West Distributor and the North/South Distributor, completing Brisbane's first inner ring road system.
4. **The Hale Street/South Brisbane Connection:** a 600-metre, four-lane tunnel linking Hale Street with Merivale and Cordelia Streets at South Brisbane. This tunnel

represents a pre-emptive move against an expected growth in traffic in the area caused by the West End Urban Renewal Program.

Stage Two of the project is a long-term, \$800 million plan to build a tunnel that completes the underground network:

5. The Kingsford Smith Drive Duplication: a 3.9-kilometre tunnel linking the Inner City Bypass at the Breakfast Creek Hotel with the new alignment of the Gateway Arterial Road. This tunnel ensures that each of the city's main arterial roads is directly connected to the inner ring road system.

TransApex will be funded on the basis of a public toll set at \$2.00 (inclusive of GST) per segment link.

(Source: Liberal Party, *Moving Brisbane*, May 2004)

TransApex: Post-Election

