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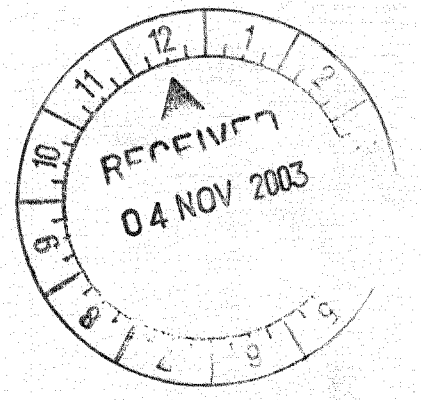

Mr Bruce Billson M.P.
Chair
Standing Committee on Environment and Heritage
House of Representatives
Parliament House
CANBERRA ACT 2600
AUSTRALIA

Tuesday, October 28, 2003

Dear Mr Billson

Inquiry Into Sustainable Cities

On behalf of the members of the International Association of Public Transport (Union Internationale Des Transports Publique - UITP), it is my great pleasure to present a Submission to the Standing Committee on Environment and Heritage, Inquiry into Sustainable Cities.

Included with the Submission is a Presentation prepared by our Brussels Office:

- **"3 Steps To Sustainable Mobility"** - Brochure with international examples demonstrating the positive contribution public transport makes to the achieving sustainable mobility
- **UITP Charter on Sustainable Mobility -** setting out UITP's and its members' commitment to explicitly incorporate sustainable development as a strategic objective and to play a leading role on the issue
- **Better Urban Mobility** - Brochure clearly outlining the problems and the solutions available to improving urban mobility with a set of international best practices

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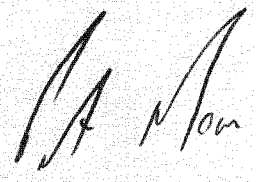
and

- Copy of the latest UITP Publication – Public Transport International – **"Sustainable Development".**

UITP appreciates the opportunity to make a Submission to the Inquiry and we look forward to cooperating with the Standing Committee on Environment and Heritage on this vital issue for Australia and the world.

In particular, we suggest the Committee examine the opportunity for becoming a signatory to the UITP Charter For Sustainable Development, now signed by UITP members in fifteen (15) countries across four (4) continents.

Yours Truly



Peter Moore
Executive Director

SUBMISSION NO. 171

Secretary:...
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INQUIRY INTO SUSTAINABLE CITIES

Australia, without doubt, has some of the world's most livable cities - but as described by international transport expert, Hank Dittmar from "Reconnecting America", on his round-Australia UITP Seminar tour in September 2003 –

"Australia's major cities remind me of California ten years ago where the State failed to make the most of opportunities to improve mass transit systems – result – California is not a very desirable place to live any more"!

The number of miles Americans travel on the roads has doubled since 1963. The number of overweight children ages 6 to 11 has doubled in the last 25 years – the average 11-year-old weighs 11 pounds more than in 1973. Nearly 65% of American adults are now overweight, and the incidence of diabetes doubled between 1980 and 2000, to 12 million cases.

New York Times – 4 September 2003

It is dangerous to rest on one's laurels. Australia's major cities will need to make sustained efforts to improve their environment, efficiency and quality of life if they are to continue to prosper.

One key area threatening the future success of our cities is from ever growing traffic volumes fuelled by expansion in employment, resident population and tourism.

Furthermore, the share of employment in the CBD taken by people living in the inner suburbs of our major cities is increasing reflecting the gentrification of these areas and the changing nature of employment in the cities.

Total movement of people to and from the CBD in cities like Brisbane, Sydney and Melbourne is expected to grow by between 20% and 30% by 2020. This will be accompanied by equivalent growth in light commercial vehicles, couriers and other vehicles servicing the city centres.

The point has been reached where:

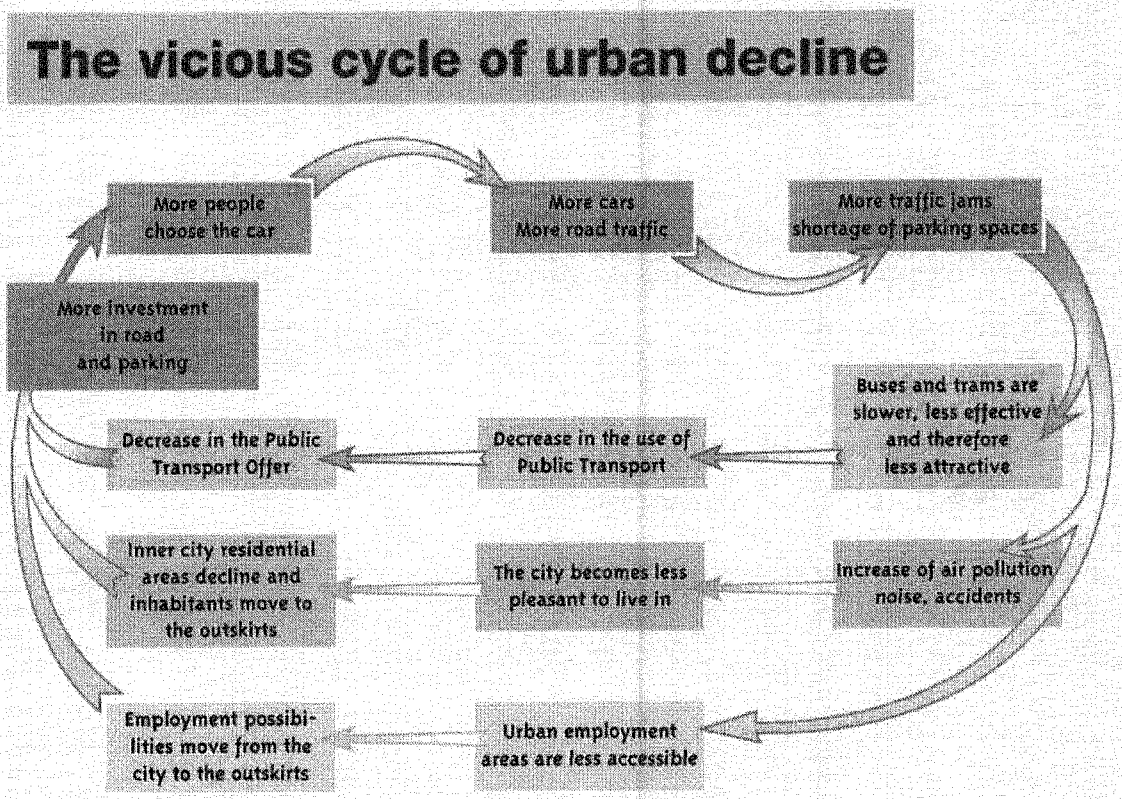
- Future growth in traffic is likely to cause significant congestion, reducing the amenity and efficiency of the city as a place to do business

- The public transport systems, covering the cities and inner suburbs need to be upgraded, both in capacity and quality, to take a greater share of the travel task. Available space needs to be used more effectively. This means re-allocating space used by private cars for passenger transport and pedestrians

What is more, external costs of transport are rising.

By the year 2010, in Australia's major cities, it is estimated (BTRE 2002) that road traffic, which already constitutes over 80% of total passenger kilometers, is forecast to rise by some 30% over 1995 levels, if no measures are taken to counter this trend.

Overall, external costs of transport are estimated to rise by some 40% over the same period, mostly involving road. **It is hard to overstate the importance of rapid action to reduce the massive and increasing negative social impacts of transport.**



As we enter the new millennium, communities around Australia, particularly those that are bearing the impositions of increasing fuel prices, congestion and social marginalization, are seeking a new direction - that mass passenger transport become the preferred choice – one that everyone – young or old, trendy or not will use because they like it and want to make it part of their daily routine - and because mass passenger transport is practical and user-friendly and not simply a public spirited transport mode in the sense that it uses urban space, energy and natural resources intelligently.(UITP February 2003)

A presentation by the President of the Canadian Urban Transit Association to the UITP World Transport Congress in Madrid, (May 2003) summarised the major challenge facing mass passenger transport:

"It is clear that matching the flexibility of the automobile is unachievable. The key to achieving integrated mobility is the notion of customer-orientation, a mindset that has the needs and the priorities of the customer at heart. This means a political, trade union and management commitment to adopting a philosophy of the customer as a critical focal point.

While the obvious advantage of private transport is the ability to travel from A to B in comfort and privacy without interruption, mass passenger transport requires multiple individuals to travel together, thereby limiting flexibility and requiring trade-offs regarding convenience, spontaneity and mobility.

The political and organizational challenges as well as the financial resources required to optimize the possibilities for integration are enormous. But we must adopt the customer-first principle if passenger transport is to develop a much stronger role in the urban areas of the 21st century".

Most major cities of Australia and indeed the world face a dilemma. Clearly we are not going to build our way out of this problem. Current levels of community concern about the cities offer an unprecedented opportunity to act and move towards a more sustainable transport vision.

"More and Faster"
People travel longer distances and more frequently than they did 50 years ago. However, the time people spend making a trip remains roughly the same. In short, people are demanding more mobility, faster. It is clear that this growth in travel demand cannot be supported by existing transport infrastructure, and building more roads has already proved, time and again, not to be the answer.
In rapidly developing countries, ad-hoc urban planning and urban sprawl combined with increasingly congested roads has already brought alarming consequences. People have to commute for longer and high levels of congestion makes surface public transport services less reliable and less attractive.
If they have the choice, more people then travel by car, which is more expensive and as slow but provides more comfort.
This further marginalises the poor and the less able as not everyone has this choice. It also makes all transport less safe, as increased traffic increases the risk of accidents for everybody.
This has a strong impact on the mobility of women and the young and ageing populations, who rely heavily on public transport for their mobility needs.
(UITP 3 STEPS TO URBAN MOBILITY-2003)

Urban dwellers in developing countries are traveling twice as far as they did 20 years ago. Typically, US city dwellers travel more than 15,000 km a year within the urban area and make about 3.5 motorised trips a day, all by car. In western European cities, people travel between 6000 and 11,000 km a year by motorized transport, but 25 to 35% of these trips are by mass passenger transport. These people make between 1.6 and 2.3 motorised trips per day.

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The good news is that well-developed mass passenger transport networks provide highly competitive door-to-door journey times compared with the car. According to data presented to UITP, passenger transport is 50% faster than private transport in Tokyo and Osaka, 31% faster in Mumbai, India and 100% faster in Hamburg, Germany. Passenger transport is very competitive with road in London, Oslo, Paris, Vienna and Zurich. However, apart from New York, passenger transport is much slower than travelling by car in North America and Australian cities, reflecting the greater fluidity of the road networks.

Many cities have decided to tame the car #
(# G Glazebrook – Improving Accessibility – August 2003)

There are now many cities investing in passenger transport systems and restricting private automobiles, to improve their amenity and efficiency. In particular, there are 400 light rail systems in operation and 100 under construction in cities ranging from London and Paris to smaller cities such as Strasbourg and Portland. For example:

- *Strasbourg in France has progressively installed a light rail system which now carries over 200,000 passengers per day, and which allowed a large area in the city centre to be pedestrianised. Buses were re-routed to feed the light rail, and park and ride facilities provided to give people a choice of travel options, with light rail being the preferred mode to access the city centre.*

- *Portland in Oregon applied a similar approach, developing a light rail network and undertaking urban design improvements to the city centre. This has revitalized the CBD, and given Portland an enviable reputation as one of America's most attractive and livable cities.*

- *London has experienced chronic traffic congestion for many decades, despite having an extensive underground rail network. Travel speeds in the central area were very low, making bus travel inefficient and unattractive, and reducing the efficiency of the city as a place to do business. The Lord Mayor therefore recently introduced a five-pound congestion tax for non-exempt vehicles entering the Central City area. The revenues from the tax are being reinvested in improved mass passenger transport and traffic management. The scheme has cut traffic in the Central London are by 20% since introduction in February this year. Bus travel times have been cut by 15%, improving both efficiency and amenity.*

- *Stockholm recently decided to trial a similar scheme to that of London for its Central area. Many other cities (including Paris) are examining the experience in London to see how it can be applied to their situation.*

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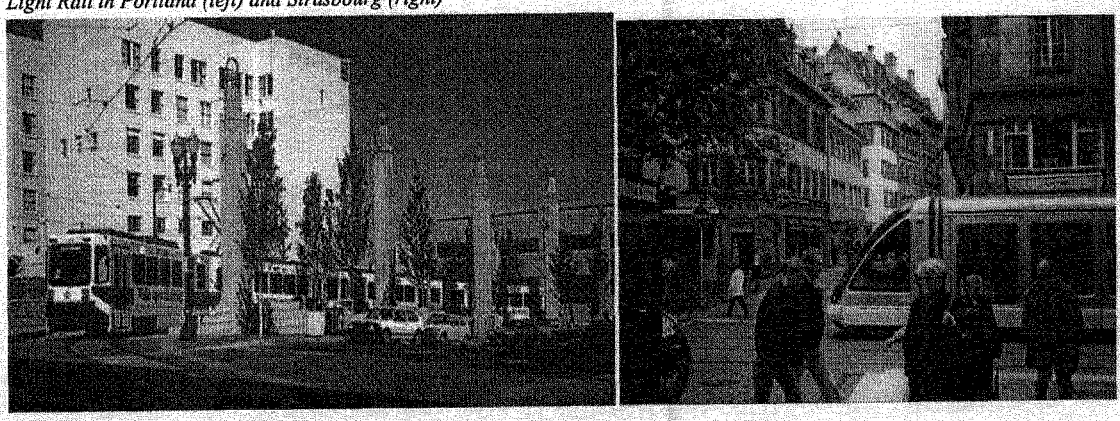
Light Rail in Portland (left) and Strasbourg (right)



A Combination of Carrots and Sticks is Needed

These examples illustrate that successful schemes to tackle traffic congestion involve a combination of carrots and sticks - measures to restrict or limit cars, combined with measures to improve the alternatives (passenger transport, walking and cycling). Use of carrots alone has often been unsuccessful, since people are reluctant to give up the perceived benefits of driving their own car, even when they know this causes congestion, which delays everyone else. Equally, measures to limit the car are unpopular and impractical unless the alternatives are made much more attractive and convenient.

It is an easily demonstrable fact that mass passenger transport is far more economically-efficient for the community as a whole than private transport.

The direct financial costs of journeys made by private modes of transport in Western Europe take up an average of 6.7% of GDP, compared with only 1.6% for public modes of transport. In the European Union, congestion costs alone have been estimated at an average 2% of GDP, or about 120 billion euros. Public transport also consumes 3.7 times less energy per passenger than private modes of transport in Europe.

The difference is even more dramatic in the case of Japan, where public transport is as much as 10 times more energy-efficient than private modes of transport.

In Australia, road congestion costs exceed $12 billion annually and growing.

Mass passenger transport services typically account for 5-8% of travel needs in Australia's major cities. If mass passenger transport is to make a significant contribution to dealing with the issues of urban congestion and related issues, this usage rate needs to be increased to at least 12% in the medium term with a longer term target of 20%.

All of this is well and good, but it is difficult to persuade governments and the business community to opt for sustainable and environmentally-friendly transportation unless it is a viable business proposition.

A major reason for the lack of tangible action is the absence of a transport policy support at the Federal Government level. The Federal Government does not have an urban transport policy but does pursue a tax regime that is detrimental to the use of passenger transport. It is difficult for State Governments to provide high quality public transport services without that supportive policy framework.

This is despite the obvious problems of too many cars in cities, their contribution to global warming, accidents and other major social and environmental difficulties. In fact the GST and ongoing arrangements for Fringe Benefits Taxation bring a degree of relief to motorists while further taxing public transport users.

It is frustrating to see how the private motor car is an overly protected species, while public transport is under-valued and under-appreciated

Consider this:

- Over the past few years we have seen car prices drop post-GST by around 5-6% while mass passenger transport fares have increased by 8-10%.

- FBT benefits continue to provide for extensive car usage and the cessation of fuel price indexation

Moreover with the 2003 Federal Budget, we are seeing increases in the costs of alternative fuels – most of which are used by commercial vehicle operators.

Fifty years of funding facilities for motorists in Australia has not achieved much in terms of improved accessibility or an improved environment for people. It would be instructive to put some of that same effort and funding into sustainable development through new types of urban form and transport over the next twenty years to see what could develop.

Political Leadership

UITP has consistently argued for an integrated and prioritised approach to transport and planning matters in Australia. The recent initiatives announced by some State Governments in this regard are to be applauded.

It is the view of UITP that effective resolution of our cities future transport requirements must take into account the important needs and capabilities of adjoining regions. Our major cities are emerging as a number of overlapping and interlinked communities

On this basis, the question of their future transport needs cannot be properly addressed without due consideration of other related transport and social issues.

Political leadership has emerged as the key issue for public transport into the future.

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Unless local, state and federal governments around Australia set a new direction for public transport and begin to play an active role in its implementation, then it is not likely that our cities will become the high quality, internationally competitive places that we aspire to occupy and function within.

As UITP has suggested, the time for tinkering at the edges of transport policy in Australia has passed – it is time for delivery!

Let us start with the premise that there is an urgent need for changing the mix of transport - UITP can cite few examples of major cities in the world continuing to build expressways in their metropolitan areas.

One of the key issues for all Governments is funding capital infrastructure and the ongoing operations of quality passenger transport systems.

Funding Public Transport - But How?

Clearly, well-designed public transport networks can make a significant impact on urban congestion. But it is up to planners and operators to press the case for investment in public transport. All too often the high cost of investing in public transport is seen as a major deterrent.

It is time new sources of funds were identified in Australia to build new transport systems.

Solution 15: Innovative Financing is needed for investing in Public Transport

A large part of the cost of the tramway in Rouen, France was financed by the transport levy paid by employers.

Investment in a good public transport system benefits all citizens.

The advantages of good public transport networks are not only confined to their passengers. Therefore, investments in infrastructure and all operational costs should not be entirely paid for from the farebox revenue. Non-users should also contribute, as they also benefit from having an attractive public transport system and roads less congested.

There are many ways to link public and private financing and to raise funds for public transport:

- Property developers's contributions (e.g. Hong Kong, USA, Docklands GB).
- Taxes on salaries (e.g. the Transport Levy in France) are spent on improving public transport.
- Tax on fuel e.g. in Germany is dedicated to local transport investment.

Each country has different ways to fund Public Transport projects, but investment should be made where it benefits the most citizens

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Sustainable Cities – October 2003

Perhaps we could look to the example of *"Congestion Pricing"* in London

- Congestion Pricing

The world's most ambitious traffic-reducing scheme got off to a relatively smooth start in London.

The congestion charge ($BP5 per day) was introduced on 17 February 2003. The scheme - seen as a huge political gamble by London Mayor Ken Livingstone - aimed to reduce congestion in the British capital, where traffic moved at an average of less than 10 mph during the day.

Transport for London has reported that since its introduction:

- Traffic has been reduced by 20% and delays cut by 30%.
- Speeds in the charged zone have increased from 9.5mph to 20mph.
- Delays to buses caused by congestion are down by half.
- Bus patronage is up by 14%.

All of the proceeds from the Scheme are being directed to public transport. This is an essential aspect of the Charging Scheme- the public can clearly identify that the funds are directed to public transport and not consolidated revenue – "transparency" is all important to successfully introduce new taxing regimes for the community.

Similar schemes are now being considered for Stockholm, Birmingham and Manchester with major cities in the United States expected to follow suit.

A big plus for congestion pricing is that technology makes it feasible. With video cameras tracking licence tags, or responders on windshields, checkpoints or visual inspections are no longer necessary. The responder technology can even adjust pricing to known hours of the day, or actual road conditions. The principle is easy.

You pay for what you use!

But are Australia's major cities ready for such a scheme? Traffic congestion has become serious enough to suggest that the city is a logical candidate for such a scheme. But we need to be careful in how it is applied – even in Singapore with its enviable high-quality mass passenger transport and sophisticated cordon pricing systems there is a huge demand for car ownership. Quota controlled 10-year Certificates of Entitlement in Singapore change hands at up to ten times the value of the actual vehicles.

Singapore - Electronic Road Pricing Scheme
- Population: 3.6 million
- Total Vehicles 700 000
- Introduced payment for entering the Central Business District (CBD) in 1998
Different tolls for the different roads used are automatically debited via a smart card and device. Restrictions apply from 7.30 am to 7.00pm and from 7.30 am until 9.30 pm on the outer expressway
Benefits:
- Reduction of nearly 25,000 cars during peak times and an increase in traffic speed.

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- *Total reduction of traffic in zone during charging period of 13%.*
- *Increased passenger use, meaning less solo drivers.*
- *Shift of vehicles from peak to non-peak periods.*

But how effectively can urban public transport match the quality of travel offered by the private motor car?

There is an imperative to occur before charging is considered – a high quality, reliable mass public transport systems. If commuters are to be "priced encouraged" out of their cars, strong rail and bus alternatives and appropriate "add-on" services must be available.

The "Seamless Journey"

The concept of the "seamless journey" for public transport requires new kind of partnerships, based on fair and long-term co-operation, rather than competitive free-for-all in search of mythical economies.

To match the requirements of today's traveler, a comprehensive transport system must bring together traditional bus and rail services with such innovations as shared taxis, car-sharing, pedestrians etc. Concrete action to enhance the attractiveness of public transport is needed from both operators and local authorities.

The choice of transport modes and the links between them are also critical, from the train to the taxi - not forgetting cycling and walking and appropriate car use.

Interchange between modes must be improved to take account of customer needs, technical performances, the area of influences and the financial parameters of each.

Integrated park and ride can work

Some people claim that it is impossible to get people out of their cars and on to passenger transport, especially for short trips. However the experience in cities such as Portland and Strasbourg suggests that this is not the case if well-designed park and ride facilities are combined with an attractive, high frequency, convenient passenger transport option.

Strasbourg has built eight park and ride facilities on its initial light rail lines, and has four more planned for its new extensions. Portland has some fourteen park and ride facilities and both systems generate a significant share of total light rail patronage from park and ride. A number of these facilities are relatively close to the downtown areas, and involve transferring to a short ride on the light rail system. This helps reduce traffic in the city centres.

In addition the Portland light rail system provides good access to the whole CBD, whereas driving in and parking in the city can still involve significant walks, depending on the final destination (s).

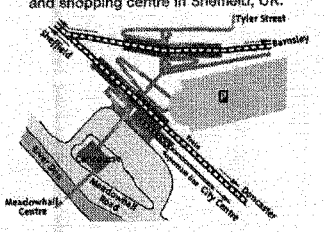
Solution 11: Attractive Interchanges are key to successful public transport

An interchange in Vancouver British Colombia, Canada showing the easy transfer between modes.

The larger the city, the more passengers have to change between buses, metros, trams or other modes. This waste of time can be a great inconvenience, if these interchanges are not well planned and made attractive.

In good interchange areas, passengers should be able to use their time in an enjoyable way, to dine and shop for instance, and these areas can become a dynamic part of a city.

Public transport interchange and shopping centre in Sheffield, UK.



Interchanges should not be only used for transport purposes, but should be developed as interesting and lively parts of a city.

Electronic Ticketing/Passenger Information

Smartcards, integrated ticketing, real-time passenger information, convenience, safety and many other issues are all essential elements for passenger transport to become as convenient as the private motor car, all essential elements to introducing the concept of the "seamless journey".

Best Practice 8: Easy access to all modes by 'e-ticket'

Nearly 80% of the total population of Hong Kong possess at least one smartcard. Each day 4.5 million transactions for public transport are made – a remarkable technical success for improving client service.

A contactless smartcard in Hong-Kong has been in operation since 1997. This contactless ticketing system integrates all modes of public transport (trains, metro, light rail, bus and ferries).

Used by 85% of passengers, the Smartcard reduces access time to platforms and vehicles. Its use is not limited to public transport and electronic purse applications have been added so that other services such as parking, taxis, and the telephone can also be paid for. The overwhelming success is attributed to its convenience.

New marketing applications and revenue streams are being developed and transport applications are being called the 'killer application' for contactless smartcards.

New electronic tickets make journeys easier for public transport users.

Best Practice 7: New technology can be used to better inform passengers

London Underground is one of the leading transport companies in the field of information technology, with its real-time information giving next train arrival times.

OVR, Openbaar Vervoer Reisinformatie, is the intermodal source of passenger information for The Netherlands. A single telephone number for the call centres gives access to all the timetables of any mode of public transport, as well as, a 'door-to-door' itinerary showing the best way to the chosen destination. OVR also takes reservations and payment, and the information it gives out includes taxis and walking or cycling itineraries. OVR receives more than 10 million calls per year.

Goteborg, Sweden, has a network wide real-time passenger information system. The information centre monitors the position of vehicles on their routes allowing real-time information of the next service to be given at stops, including any disruption to service. This information is also available in the vehicles themselves and is accessible via the Internet and mobile telephone (WAP – wireless application process).

Good passenger information is a deciding factor to increase the competitiveness of public transport.

Quality of Public Transport – The Key to Changing the Car Culture (Reprinted from Metro Report – Railway Gazette, Great Britain 2003)

Across the world people have become accustomed to the convenience of door-to-door travel, on demand, at any time of the day or night.

For public transport to match the cars' flexibility, it needs to function as a seamless network with no barriers between rail, light rail, metro and bus. Interchanges must be physically convenient and timetables and ticketing should be comprehensible to the most inexperienced user.

Operators in Switzerland or Japan argue that running services on-time might be more attractive than investing in complex information systems. But there is evidence that many journeys are lost to public transport because of poor information, missed connections, indifferent performance and the absence of true through ticketing. Many operators are beginning to adopt smart cards, although we have yet to see a genuinely "go-anywhere application" along the lines of the Dutch *strippenkaart*.

As Joseph Kerr argued in the Sydney Morning Herald on March 12, 2003;

"Funding of public transport must be accompanied by a radical rethink of our transport priorities!

Road planners, facing a similar problem in the late 1980s, uncovered new revenue streams through tollways. It is not so easy with public transport. Applying big

surcharges to specific tickets has proved an abject failure, as shown by the airport rail link.

But user pays - with "user" defined as all those who travel in the city and benefit from good Sydney transport - from several sources - is workable and affordable if applied to big-ticket items that consumers can see direct benefit from.

- Petrol Taxes

In the western world, Australia has one of the lowest prices for gasoline – 3rd after the United States and Canada. Petrol in the United Kingdom and Europe is currently priced at around $A3.00 per litre and provides a significant encouragement to seek alternative means of transport – and provides Governments with a funding source to support that alternative.

On environmental grounds, never mind energy security, Australia taxes gasoline too lightly.

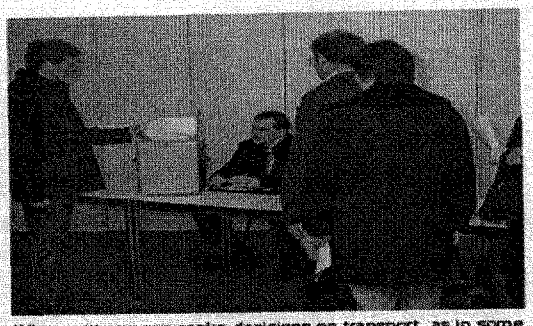
Better than a large one-off increase to pricing that will emerge as supply pressures intensify around the world, a politically more feasible idea and desirable in its own terms would be a long-term plan to shift taxes ***from incomes to emissions of carbon.***

This would spur development of new transport technologies—vital in curbing the demand.

Gradualism is the key to doing this intelligently. The time to start is now!

State and Territory Governments in Australia have continued to avoid the opportunity to directly tax fuel sensing a political backlash to such a policy. However, recent work undertaken by the University of Sydney's NSW Warren Centre and others suggests the community will be accepting of such policies where a transparent arrangement for directing funds to public transport is clearly delineated and delivered.

Problem 13: The decision maker's perception of public opinion

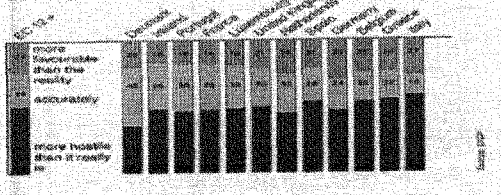


Where citizens can make decisions on transport, as in some US States or in Switzerland, they generally approve investments in public transport and restrictions of private traffic in urban areas.

A large-scale population survey in 12 European countries has shown that:

- Car traffic is the most important local problem.
- 59% of the population say car traffic has already reached unbearable or hardly bearable levels.
- 84% of the population would opt for priority for public transport, even if it conflicts with private traffic needs.

How politicians evaluate the opinion of the public towards public transport



Half of the political decision-makers underestimate the wish of their electorate to give buses and trams priority.

Two major Australian community attitudes studies have been undertaken on urban transport issues in the past 2 years. Both surveys reflect similar findings.

The first is the ARA Urban Transport NewsPoll in August 2001 which found:

- 83.7% support the building of more rail lines to reduce road congestion, compared with 38.3% supporting construction of more freeways to reduce congestion;
- 83.2% support Federal Government funding of new urban railways along the same principles as it funds urban roads; and
- 60% support giving pedestrians and passenger transport priority over cars.

The second is the Warren Centre at Sydney University, *Sustainable Transport in Sustainable Cities* community values study in early 2001, which found:

- 85% were opposed to spending on roads at the expense of public transport;
- 73% indicated that not enough money was being invested in Sydney's passenger transport;
- 71% considered that transport planning should focus passenger transport rather than toll roads;
- 70% favoured passenger transport improvements being funded from the roads budget; and
- 64% of respondents favoured road demand management instead of more freeways.

Both surveys provide strong evidence of community attitudes that should be reflected through the vision, policies and objectives of all levels of Government. These surveys also strongly suggest community acceptance for the need for change in policy and funding practices and that infrastructure investment should be re-directed towards public transport to stimulate this change.

This is clearly evidence from Europe and the Warren Centre, at Sydney University which suggests decision makers totally underestimate the expectation and strength of public opinion relating to additional funding and policy priority for public transport over road infrastructure.

The results of these two separate surveys are:

	Europe	Warren Centre
Decision Makers Opinion	82% favour public transport	89% favour public transport
Public Opinion	80% favour public transport	70% favour public transport
Decision makers expectation of public opinion	43% favour public transport	56% favour public transport

Sources: UITP and the Warren Centre

It would appear that community aspirations for more sustainable transport are well ahead of political and bureaucratic "conventional wisdom" in that the decision makers are unwilling to recognise what the public want, and turn it into policies and funding obligations for public transport.

These issues are likely to be of increasing political concern in the years ahead to those politicians who do not read the signs.

Land Use Development

Throughout Australia cities have evolved into urban regions containing many different nodes of density and many scattered centers of employment, shopping, recreation and housing. People work everywhere; five years in one place is considered a long stretch; and companies follow talent.

We have seen the evolution over the past decade of the emergence of no dominant employment centre acting as the economic engine for the entire Brisbane area. The central business districts of our cities are becoming the Central Social Districts.

This changing urban form is best demonstrated by trends in office development over the past few decades. Around Australia, between 1979 and 1999, the share of office space in central business districts declined from an average of 79% to 61%, while the share of office space in outlying areas rose from 21% to 39%.

However, rather than being clustered, much of the outlying office space has been widely spread over hundreds of square kilometers, making the provision of public transport very difficult. Around Australia, approximately 70% of the nation's commuters drive to work alone. Only 5% share and only 5% use public transport.

Why? - because people are increasingly commuting from dispersed locations to dispersed locations.

The challenge in making this new urban form a workable one is to find acceptable ways to promote more compound development and mixed land uses. Office space throughout urban areas, not just in downtowns, must be much more densely grouped

and better connected to other areas. This means targeting more development so it supports passenger transport, rather than precludes it.

The changing demographics of Brisbane with an ageing population, and the nation as a whole, suggest an increasing demand for higher density, mixed-use, pedestrian-friendly developments – not just in the centre of Brisbane but in outlying areas.

Over the next two decades, the number of Australian households without children is expected to grow by around 80%, with childless couples constituting as much as 70% of the total population. Of these childless couples, which include married couples as well as singles, most growth will occur in those households aged 45 and older. This tells us that a different market is forming – a market more interested in maintenance-free, walkable communities than isolated sub-divisions.

However, many developers trying to offer a different approach are often stymied by restrictive zoning and planning regulations that limit density and mixed-uses.

Regulatory barriers now rank as one of the largest obstacles to alternative development with higher density development one of the most compromised.

It is true that alternative development often means development that that is denser and may contain a variety of uses. It means something different than big house on big lots accessible only by the private motor car. But it does not automatically mean lower property values or more traffic congestion than a traditional neighborhood.

"Real estate values have increased substantially along Brisbane Busway"
Property values along Brisbane's south-east bus line have risen as much as 20%, as buyers take advantage of traffic free travel to the city. Around 375.000 private vehicle trips were converted to public transport along the bus line. The 15.6km line with an operating speed of 80km/hr, and opened in 2001, is part of a planned 75km long route.

UITP 3 STEPS TO URBAN MOBILITY-2003)

Denial of growth, denial of change and denial of density will not preserve the status quo in our communities. Growth and change are inevitable, and one way to accommodate both is through well-planned density.

Density "done-right" can result in increased tax revenue, expanded employment opportunities, expanded housing opportunities, additional public amenities and revitalization of neglected areas. It means offering people more choices in which to live, work, relax and move from one place to another.

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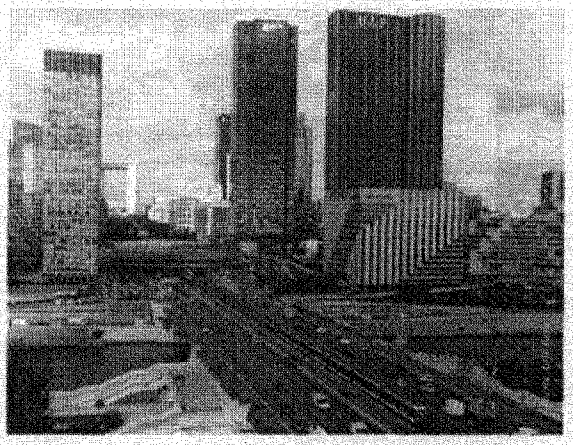
Solution 1: Urban density is more cost-effective than urban sprawl



A comprehensive study for the Paris region shows, that in the outer city area where there are less than 30 inhabitants and employees/ha the cost of journeys made by car are 3 times higher than those made in the centre of Paris by metro or RER, where the density is as high as 400 inhabitants and employees/ha.

In low-density areas the car dominates the choice of transport, and the cost of providing public transport is high. In these sprawling cities almost all journeys are made by car.

The Millennium Cities Database for Sustainable Transport, prepared by UITP and Murdoch University (Aus.), shows that the cost of passenger transport for the community, as a proportion of GDP, is as low as the density is high. The reason is that in dense urban communities, the share of journeys made by public transport is the highest.

Urban Areas in	Density Inhabitants/ Hectare	Share of journeys on foot, bicycle and by Public Transport	Cost of journeys (% of GDP)
USA, Canada Oceania	18	15%	12.7%
Western Europe	55	52%	8.3%
Japan, Hong Kong, Singapore	134	62%	5.4%

Source: UITP Millennium Cities Database

Put an end to urban sprawl; the cost of journeys is low when public transport is the dominant mode of transport in a high or medium density city.

"Rail helps reshape urban land use into dense, more sustainable patterns"

In Perth, Western Australia, patronage of a new 30km urban rail line linking the northern suburbs to the city, previously a bus-only corridor, increased by 40% in the first year and to 56% a few years later. 25% of the increase in the first year came from car drivers who changed their habits to use it to travel to work.

Impact of the Currambine Line on rail performance indicators 1991-1996*

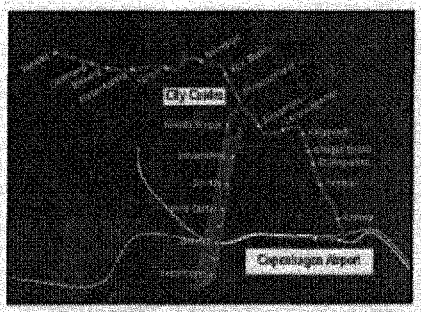
Indicator	*1991*	*1996*	*% change*
Rail vehicle km per capita	*4.8*	*10.*	*108%*
Average rail speed	*34*	*50*	*47%*
Rail passenger km per capita	*97.3*	*275*	*183%*
Rail boardings per capita	*7.0*	*22.5*	*221%*

** Source: Kenworthy J., Laube F; Urban transport patterns in a global sample of cities & their linkages to transport infrastructure, land-use, economics & environment.*

Best Practice 1: Public transport adds value to developing new areas

The London Docklands light rail was jointly financed by the developers of this new area.

In 2002, a new automatic metro line financed by private funding will link the new town of Orestad to the centre of Copenhagen. A company owned jointly by Copenhagen City and the Government of Denmark is in charge of building and operating the new metro line. It borrowed capital based on floating state and city backed bonds which are paid back by selling the land to property developers.



Finance new public transport investments with the land-owners, who are able to build up undeveloped areas, as in Copenhagen.

Investment in providing a high quality public transport system increases the value of real-estate

Remuneration and Taxation

There is a widespread perception that the taxation system acts as a disincentive to employers providing financial incentives to the use of modes other than the private motor car.

While an employee is unable to claim, as a tax deduction, for travel to and from work, nonetheless economic benefits for cars are available for employees offered a salary package.

Under certain circumstances, employees are able to improve their financial position by leasing a vehicle and reducing their taxable income. The FBT subsequently paid is based on a concessional rate depending upon kilometers travelled per year. No additional cost is imposed on users as distance traveled increases – indeed the taxable value and FBT payable actually falls the longer the distance travelled.

It is suggested that not only do FBT concessions on business vehicles cost the Commonwealth much-needed revenue (estimated $740 million in 1996/97 – source UNSW), but the concessions cut directly across the Commonwealth's declared policy on greenhouse gas reduction.

It is also argued that such FBT concessions lead to a growth in cars used to travel to work, with up to 50% of cars to the Sydney central business district (probably similar

in Melbourne and Brisbane), receiving some form of FBT concession, causing an increase in the number of cars per household.

- International Examples

There have been moves in other countries of the world to remove taxation inequities as they relate to transport.

United Kingdom
In the United Kingdom changes were introduced in the 2002 Budget to the effect that:

- Taxation of company cars rewards cleaner and more efficient cars, by linking the tax charge to the cars exhaust emissions, with the objective of helping tackle global warming and improving local air quality.

- Employer subsidy of bus public transport is no longer subject to tax as an employment-related benefit, provided that the benefit is reasonably constrained to commuting travel.

United States
In the United States the taxation system allows employers to provide a range of tax-free non-car travel benefit options up to a value of $US100 per month. The benefit can be additional to current salary; taken out of current salary or transferred from another benefit (e.g. cash-out of car parking entitlement) by agreement between the employer and employee.

Several US States provide employers with tax credits for offering commuter benefit programmes. For example, Maryland has legislated to provide a 50% corporate income tax credit for employer-provided public transport benefits up to $US30 per employee per month.

Canada
In what is a first for Canadian governments, that the provincial government of Quebec has adopted a measure to provide tax incentives to employers and employees for public transport commuter benefits. The measure went into effect in mid-2003.

The new tax initiative allows an employer who pays the cost of monthly public transport passes, or who reimburses employees for this cost, to deduct this amount from their pre-tax salary. Employees who receive the benefits pay no additional tax on the benefit.

An additional provision allows workers who purchase their monthly passes themselves, who are not reimbursed by their employer, to deduct the total cost of the passes from their salary, as long as they are purchased for travel to work.

There is no doubt that these deductions will encourage a greater number of people to use public transport for work-related trips.

Canada, like Australia, has requested the measure several times since 1995 at both the provincial and federal government levels.

As Michael Roschalu, Chief Executive Officer of the Canadian Urban Transit Association explained:

"The Quebec initiative is a first among Canadian jurisdictions and demonstrates a serious commitment to providing tangible incentives for both individuals and employers to increase the use of public transport and reduce greenhouse gas emissions. The initiative helps to make public transport a more attractive option and levels the playing field between parking and public transport benefits. It is hoped that the Quebec decision will encourage the Canadian federal government as well as other provinces to follow suit" - **a more equitable taxation framework to support public transport and its users (current and prospective).**

Other Specific Measures To Improve Public Transport in S E Queensland

- Giving Public Transport A Reserved Right of Way

Space is at a premium in our cities so it needs to be used sensibly.

Buses, trams and trains use 20 times less space to transport the same number of people than the private motor car.

One of the most cost-effective measures for successful passenger transport is giving it dedicated rights-of-way.

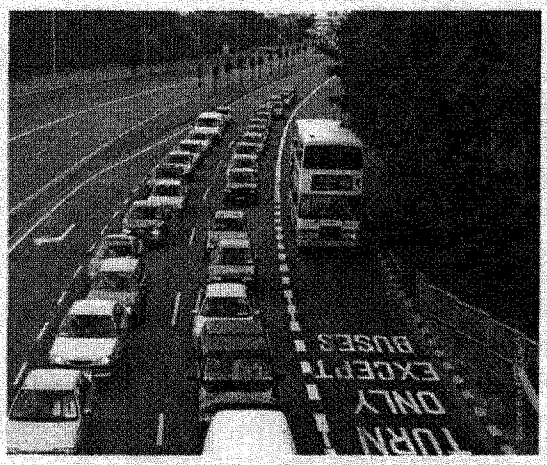
The resulting increase in speed and reliability:

- Reduces the operating costs, mainly through a reduction in the number of vehicles needs and fewer spare vehicles needed to compensate for running late

- Improves the frequency of the service

- Increasing the vehicle speed and reduced waiting times results in a shorter overall journey time for passengers

Best Practice 9: Quality Bus Corridor transports 40% to 200 % more passengers at peak times



The Stillorgan Quality Bus Corridor in Dublin has a frequency of one bus every minute during the critical peak periods and since its introduction there has been a 200% increase in ridership during the morning peak time band.

A key component of Dublin's Transportation Strategy is the introduction of Quality Bus Corridors. Twelve such corridors comprise the first phase of QBCs, with others planned to follow. The package of measures along a main corridor includes:

- priority right of way – dedicated road space for buses,
- direct alignment of bus route,
- a bus every one to three minutes at peak periods,
- a modern fully accessible bus fleet,
- trained staff committed to quality and customer care,
- real-time information with expected time of arrival of next bus,
- illuminated shelters with seats at every stop.

The results so far are very successful. Bus journey times have been reduced by 30% to 50% and 60% of the passengers are new clients who formerly made the trip by car.

Improving bus routes on corridor alignments can be cost effective and produce rapid short-term benefits.

Bus Lane Success in Sydney

Surveys undertaken by the RTA in March 2002 (Sydney Transit Lane & Bus Lane Survey, RTA) revealed that the Sydney Harbour Bridge Bus Lane had an average of 9,323 persons/hour, between 7am and 9am, and 12,005 persons/hour in the actual peak hour (7:45am to 8:45am). The comparable figures for the non-bus lanes are 1,577 and 1,650 indicating that the Bus Lane carries 45% more people in the morning peak hour than all other southbound Harbour Bridge traffic lanes combined. These person-throughput figures confirm the efficiency of bus lanes versus normal traffic lanes.

Since the installation of the Harbour Bridge bus lane, State Transit's bus patronage from northern Sydney has grown at a rate more than double that of the eastern suburbs. This is despite the north having a single point of entry (ie Harbour Bridge) into the City and the east having 5 points. Private bus operators who use the Harbour Bridge bus lane have also grown. In terms of bus and passenger numbers, the growth in bus use in northern Sydney must in part be do to the priority passengers now have on the Harbour Bridge bus lane.

- Multihiring taxis from the CBD

At present there can be major difficulties getting taxis at certain times and locations in the CBD's of our cities, such as Friday evenings, when heavy demand means that taxis are hailed before they reach the cities.

In addition, taxi fares make it expensive to use this form of transport except on rare occasions. The introduction of multihiring could alleviate these problems. It requires:

- Provision of special kiosks and safe waiting areas at special locations. These would include maps of the major cities, marked with appropriate zones.
- A system allowing passengers to book multihire taxis, and to amalgamate travelers into small groups travelling in the same direction. This could be done via small kiosks.
- Agreement with the taxi industry to use fixed, zone-based fares (rather than based on the meter) so that there is no confusion by passengers or drivers as to the fare to be paid. Fares would typically be set at 60% - 75% of the single hire fare for the equivalent trip.

Similar arrangements have been used from airports (eg Sydney) and other locations where there can be shortages of taxis, leading to long delays.

What Then is the Future for Australia's cities?

Will our cities continue to sprawl, become more congested and further dependent on a larger number of motor cars?

If so, this will show the way to significantly increased congestion costs, declining air quality, social malaise and lower economic returns leading to further declines in economic output and growth.

Or, will decision-makers recognise that public transport has a significant role to play in the economic and social life of their citizens, critical to the future growth of any society in an ever-increasingly competitive world.

Solutions lie in better transport and land use planning, better public transport options, new technologies and knowledge-based industries, land and water restoration projects, regional development plans and many other areas.

Australia's road users are not meeting the full community costs of their travel choices.

Australian road users cause community costs of about $30 billion annually but only contribute a little over one-third of this amount in taxes and charges.

With such poor pricing of road use, there is excess road travel, with its attendant community costs of road damage, congestion, accidents, air pollution, greenhouse gas emissions and noise and with adverse social impacts on those without access to private vehicles.

CONCLUSIONS

- Australia's major cities have experienced major growth in the last five years, with resultant growth in traffic congestion and loss of amenity. Future growth is set to continue, threatening the efficiency and amenity.

- It is only when pricing structures are reformed to make users more accountable for the costs of their travel choices that Australia will be able to have a truly efficient land transport system – you pay for what you use.

- It is now clearly vital to control the growth in traffic, and to accommodate growth in movement with greater use of public transport. However this cannot be achieved without improvements in both the quality and capacity of our public transport systems.

- London has introduced a highly successful congestion pricing scheme, Stockholm is about to follow, and many other cities are examining this approach, which simultaneously limits traffic and provides the funds to improve mass passenger transport and the city environment.

- Australia needs to learn from these cities and move to an integrated approach to addressing these key issues. The public have indicated that they will support this type of approach provided that revenues raised are used to improve public transport and not used as a form of hidden taxation.

We should look everywhere, and not be afraid of change **but as demonstrated by the Mayor of London, it needs real political leadership to make it happen.**

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