Submission No 6

ROAD ACCESS PRICING

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Submission re Road Access Pricing in NSW

To the Legislative Assembly Committee on Transport and Infrastructure

From Philip Laird, University of Wollongong, February 2013

This submission will draw on research conducted at the University of Wollongong. However, it does not necessarily reflect the views the University. This submission shall be of a general nature and shall address the various points of inquiry.

To start, very brief comments are offered on each point of inquiry.

1. current road access pricing (tolls) in New South Wales; In the absence of congestion pricing, more tolls and higher fuel excise is needed.
2. road access pricing policy and initiatives in other jurisdictions; Well worth a look, not only interstate, but also in New Zealand and other overseas countries.
3. the applicability of road access pricing in non-metropolitan areas; This is certainly needed for heavy trucks - will the present inquiry address this?
4. the capabilities of road access pricing technologies; These have improved in recent years to the point they can be used - what is needed now is political courage.
5. the interconnection between road access pricing and public transport pricing; At present, both road pricing and public transport pricing needs overdue reform.
6. the sustainability of current transport funding models; Quite simply, as shown by the backlog of road and rail infrastructure, the current models are not working.
7. Federal State jurisdictional issues; This is of increasing importance; however, Sydney and NSW problems are amongst the most severe in Australia.
8. the socio-economic impact of road access pricing throughout NSW; What is also important is what are the current socio-economic impacts of poor infrastructure and poor pricing.
9. the options available for a staged implementation of road access pricing applicable to NSW; Worth examining and making a start, sooner better than later.

1. A good starting point of the need for reform is given by the *Independent Public Inquiry into a Long-Term Public Transport Plan for Sydney: Final Report, 26 May 2010*, submitted to and published by *The Sydney Morning Herald*.

As noted on page 21 of this report.

> Nine themes have consistently emerged in the 571 public submissions to the Inquiry, in the market research commissioned by the Inquiry and in the Inquiry's

own deliberations.

We have tried the “do nothing” option for public transport. It has failed.

We need a complete public transport network plan and an agency that can deliver it.

A three-legged stool: **urban form, pricing and transport.**

Public transport, not just roads. the need for a single, seamless public transport network.

Cost-effectiveness.

Short-term urgency and continuous improvement.

The need for long-term commitment, now.

Leadership, transparency and consultation for the hard choices that will have to be made.

Note the importance given to pricing in this report. It is amplified in Theme 3 Integrating urban form, pricing and transport. To quote re Pricing.

Decisions about how to travel depend heavily on pricing.

The elements of pricing under some form of government control include fares, parking charges, road tolls and taxes.

The relationship between the cost of making a trip by public transport and the cost of driving can do much to determine the outcome. If public transport fares are complex this can also discourage patronage.

Also "Policy failures in any of the three areas can largely negate any accomplishments in the others."

2. Nearly 10 years ago, a NSW Ministry for Transport (2003) report Ministerial Inquiry into Sustainable Transport (Parry Inquiry) found, inter alia, ***Following consultation with the community and stakeholders, consider implementing electronic road pricing (ERP) within the next 5–10 years as a means of effectively signalling to the community the external costs of road use—congestion, pollution, road wear and tear and accidents.***

Hence the importance of pricing. However, for too many politicians, road pricing reform is a 'no go' area. Yet, as observed by the 2010 Henry Tax Review, road pricing needs addressing on two fronts. These are the use of congestion pricing in major cities and Mass Distance Location pricing for heavy trucks.

As a result of perceived shortcomings with Sydney's trains, buses and ferries, more

and more cars are being driven on Sydney roads. More freeways and tollways have been built, yet road congestion increases. It is clear that some road vehicle demand management is needed. This could be by way of a congestion tax and or increased fuel excise, as well as Mass Distance Location pricing for heavy trucks.

There is a widely held view, with some merit, that Sydney people should not have to pay a road congestion charge until public transport has been significantly improved. However, appreciable investment is now needed to improve Sydney's rail system and other public transport.

It is also of note that in 2002, the Secretary of the Australian Treasury, Dr Ken Henry[1] noted that projected increases in urban traffic and interstate road freight raised "important issues"*;* also *"Not dealing with these issues now amounts to passing a very challenging set of problems to future generations."*

3. Along with pricing, there is a need to raise more funds for land transport infrastructure - both roads and alternatives to roads.

By more funds is meant much more funds than are currently allocated in order to address a significant road and rail infrastructure deficit.

This deficit is not only in Sydney and the Central Coast (whose population between 1976 and 2011, increased some 50 per cent from 3.1 million to over 4.6 million) but also regional and rural New South Wales.

The roads deficit is well addressed elsewhere. For rail, setting aside High Speed Rail, there are well rail track deficiencies within Sydney, its links to Newcastle and Wollongong (noted by NSW Infrastructure in October 2012 as candidates for much reduced train transit times), interstate links and grain lines. Re interstate links,
in 2008, Mr Len Harper[2] noted the tracks linking Australia's three largest cities *"... are inadequate for current and future needs."* That year, the ARTC stated: *"there is no alternative but to start to consider deviations of the current poorly-aligned sections of the network."*

To expedite major deviations as opposed to minor curve easing, some effort in planning and investment will be required by the NSW Government. Two examples of

[1] Henry K (2002) in an address to the ATRF and BTRE Colloquium in October 2002accessed at www.treasury.gov.au

[2] Len Harper, Chartered Institute of Logistics and Transport 'The major task of increasing rail traffic on the East Coast' Track and Signal Oct-Nov-Dec 2008 (p9-13)

steam age track shall suffice: about 1920, the 19 th Century section between Goulburn and Yass was extended in length from 84.6 km to 93.1 km as a result of duplication and deviations. The "new" alignment had a total of 39 curves of radius 400 metres or less. On the other hand, the Whitton alignment it replaced had a ruling curvature of 400 metre radius applying at only 7 curves. Indeed, train simulation has shown that a modern superfreighter moving over the 19th Century alignment would give transit time savings of 12 per cent and fuel savings of 12 per cent when compared with the present track. Moreover, upgrading this section to modest Fast Freight Train standards would give 25 per cent savings.

The second example is that noted in a 2007 House of Representatives Committee report[3] of a major deviation between Hexham and Stroud Road where the construction of 67 km of new track would replace a substandard 91 km section to halve transit times and reduce fuel use by 40 per cent.

A further freight transport challenge within New South Wales is that of grain transport. The title of an article in The Land, 11 August 2011 says it all: *Call this a rail system? - 'Third world' branch lines driving freight onto road.s* Rail access pricing of NSW grain lines was in 2011 the subject of a review by the Independent Pricing and Regulatory Tribunal (IPART). The draft report of the review also gives attention to road cost recovery from heavy trucks, and external costs.

4. New South Wales could do with some of the leadership demonstrated by Auckland's Mayor Cr Len Brown. In February 2012, Auckland Council released a discussion paper acknowledging a deficit of at least $10 billion on Auckland's major projects and identifies 14 funding options the Council is considering. The transport funding ideas comprised:

* General rates - increasing rates.
* Targeted rates - rates to pay for specific projects.
* Development contributions - charges on new property developments.
* Regional income tax - new income tax paid only by Aucklanders.
* Regional payroll tax - new income tax paid by Auckland employers.
* Regional GST - raising GST in Auckland.
*Tax increment financing - tax on increase in property values from transport services.

[3] The Great Freight Task: Is Australia's transport network up to the challenge? p116

* Regional fuel tax - raising petrol and diesel taxes across Auckland.
* Tolling new roads - charging for new roads.
* Tolling existing roads - charging on all roads or just congested roads.
* Carparking charges - increasing carparking fees.
* Visitor taxes - nightly charge for hotel and motel rooms.
* Airport departure tax - increasing departure tax on international flights.

As noted in the New Zealand Herald 'Fuel, GST hikes eyed for Auckland' Feb 13, 2012 Mayor Len Brown in releasing a long-awaited discussion paper on transport funding options to stop dodging what he says are the tough decisions to get Auckland moving said: *"We just can't do the same old, same old and just meander along and postpone everything to another generation."*

5. This approach of Mayor Brown was then questioned by the New Zealand Minister for Transport and Prime Minister. However, in the past 12 years, New Zealand has increased its fuel excise by at least 10 cents per litre to 50.524 cents per litre as of 1 August 2012. Further increases of three cents per litre are to take place on 1 July 2013, with more to follow in 2014 and 2015. All of the proceeds have gone into both roads and alternatives to roads. The Australian fuel excise has been frozen at 38.143 cents per litre since early 2001, and needs increasing.

6. To conclude this submission, an update of a 2007 paper of this writer on road pricing is given in Appendix A.

7. Please contact this writer if further information would be helpful. Including on the topic of road pricing for heavy trucks, if it decided by the Committee that this topic is to be included.

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[redacted]
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APPENDIX A Road pricing in Australia - too little or too much ?

Updated and edited in February 2012 from a paper by P Laird presented to the Australian Road Summit Sydney 27 - 28 February 2007

1. Road user rip offs or road deficits ?

During the 1990s, it was common for motoring organisations and road transport interest groups to claim that aggregate vehicle related payments to Government exceeded road outlays by Government. Often, in their more extreme forms, propositions were advanced along the lines that motorists are ripped off and that trucks more than pay their way. A good account of the question as to whether motorists pay too much was given in a 1999 booklet by Howard Pender[4]. This study was sponsored by the Australian Automobile Association and addressed three questions. First, are motorists lightly or heavily taxed? Secondly, should they be heavily taxed? Thirdly, what is the appropriate balance between taxes on vehicle ownership and use?

Like earlier studies (eg. May et al[5] 1984), Pender differentiates between 'charges' and 'taxes'. He refers to both overseas and Australian studies including those of Neutze[6] during the 1960's, the Inter-State Commission[7] the Industry Commission's 1994 definitive report on Urban Transport, the Business Council of Australia[8], and the Bureau of Transport and Regional Economics (BTRE)[9]. Externalities are addressed in some detail.

During 1997-98 in Australia, motor vehicle payments were $12.4 billion (BTE[10])

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[4] *Taxing cars - fleecing the fleet or subsidising smog ?* Australian Tax Research Foundation, Research Study No 33

[5] Report National Road Freight Industry Inquiry

[6] Max Neutze (1964) 'Pricing Road Use' *Economic Record* 40:175-186, and (1966) *Investment Criteria and Road Pricing The Manchester School*,

[7] Inter-State Commission (1990) Road use charges and vehicle registration: a national scheme

[8] Cox, J, 1994, Refocussing road reform

[9] Up to and including (1997) Taxes and charges in Australian Transport; a transmodal overview Working Paper 34

[10] Bureau of Transport Economics (1999) Public road-related expenditure and revenue in Australia

including $8.6 billion on fuel excise and $2.3 billion on registration fees (but excluding stamp duty which is not specific to motor vehicles). In 1997-98, the outlay on road maintenance and construction was $7.0 billion. The difference is over $5 billion.

Subsequently, the BTRE[11] noted motor vehicle payments were $15.8 billion in 2003-04 including $9.6 billion fuel excise, $3.2 billion registration, and $1. 9 billion stamp duty whilst in that year, the outlay on road maintenance and construction by Australia's three levels of governments was $8.3 billion. By 2005-06[12], urban and rural road agency expenditure (Federal, State and Local Governments) was $10.4 billion.

More recently, a 2011 publication by the Bureau of Infrastructure, Transport and Regional Economics (BITRE)[13] notes that between 2000-01 and 2008-09, total government outlays on roads increased (and had nearly doubled) from $8183 million to $15,792 million.

During these 8 years, the federal fuel excise showed relatively little increase: it raised $8817 million in 2000-01 and $8686 million in 2008-09.

Although government also collects vehicle registration fees, it appears that the fuel excise is no longer a good source of revenue to fund additional expenditure on roads and alternatives to roads.

1.1. Excise and rebates

In early 2001, the Federal government reduced fuel excise and froze indexation in response to higher oil prices and community concerns. Since March 2001, this excise has remained at 38.143 cents per litre. The loss of Commonwealth revenue from freezing fuel excise indexation was estimated in Budget Paper #2 (May 2001) at $150 million for 2001-02 increasing to $1135 for 2004-05.

The CPI has increased by a factor of 33.2 per cent with 38.143 cents in March March 2001 increasing to 50.790 cents per litre in March 2011. (http://www.rba.gov.au/calculator/quarterDecimal.html). This means forgone revenue of about 12.6 cents per litre.

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[11] BTRE Public road-related expenditure and revenue in Australia (2006 update) Info Sheet 25

[12] National Transport Commission Third Heavy Vehicle Road Pricing Determination (THVRPD) Technical Report (Oct 2005, p13) .

[13] (BITRE) (2011) Information Sheet 40 - *Public Road-Related Expenditure and Revenue in Australia*

The Australian Bureau of Statistics, Canberra (2011) *Survey of Motor Vehicle Usage for 12 months ended 31 October 2010. Cat. No. 9208.0* shows that for this time period, cars, buses and trucks used about 31.2 billion litres of petrol, diesel, and LPG. This includes 18.1 billion litres of petrol.

Had of this 18.1 billion litres petrol been levied at an excise rate adjusted for CPI, at the 33.2 per cent increase the fuel excise would have been an additional 12.647 cents per litre. **The difference in total fuel excise collection during 2009-10 for petrol used in cars etc between the indexed and frozen rate would have been about $2.3 billion.**

A Fuel Taxation Inquiry reported in 2002. Although its recommendations were pragmatic and included fuel indexation at a later stage, the package of recommendations was rejected by the Government of the day.

Following the introduction on 1 July 2000 of partial rebates of diesel excise for some heavy trucks, their environmental and social costs were effectively put as zero. The ABS SMVU notes that in the 12 months ended 31 October 2010, a total of about 6.3 billion litres of diesel was used by articulated and rigid trucks. Although not all of these trucks would have been eligible for rebates, the difference between the fuel excise adjusted for inflation at 50.790 cents per litre and about 22.5 cents per litre is 28.29 cents per litre. **For this 6.3 billion litres of diesel, the forgone revenue is about $1.8 billion during 2009-10.**

The combined forgone petrol and diesel excise during 2009-10 is then about $4 billion.

This is at a time the increase in road spending was high. Road funding continues to increase, yet the petrol excise stays the same. It just does not make sense.

Nearly 10 years ago, a NSW Ministry for Transport (2003) report Ministerial Inquiry into Sustainable Transport (Parry Inquiry) found, inter alia, *Following consultation with the community and stakeholders, consider implementing electronic road pricing (ERP) within the next 5–10 years as a means of effectively signalling to the community the external costs of road use—congestion, pollution, road wear and tear and accidents.*

1.2 Two estimates of a 'road deficit'

With the exception of fuel excise, there is a very limited effort to recover external costs from motor vehicle use. However, this is offset by Federal funds for roads (now at record levels), and generous taxation deductions for motor vehicle expenses (about $4.8

billion was returned in 2003-04 to taxpayers who as individuals, companies, partnerships or trusts claimed over $18.5 billion that fiscal year[14]).

The BTRE[15] mid-range estimate of the annual health related costs from air pollution from motor vehicles in Australia's capital cities was $2.33 billion for the year 2000. This comprises $1596 million from the estimated cost of mortality (premature death as a result of air pollution), and $735 million for morbidity (quality of life and/or productive capacity of victims impaired or reduced as a result of air pollution). Following a European approach[16] the BTRE effectively attributes air pollution costs to PM10 (particulate matter of size less than 10 microns) levels.

In a further BTRE paper[17], estimates are given of both PM10 emissions in Australia's capital cities and the kilometres driven for various types of motor vehicles. Analysis of this data[18] shows that the average health cost of air pollution from operations of cars (and other small passenger vehicles) in Australia's capital cities is 1.3 cents per vehicle kilometre (ranging from 0.7 cents per vehicle kilometre in Perth to 1.6 cents per vehicle kilometre in Sydney). To recover an average cost of 1.3 cents per car kilometre through fuel taxes, assuming an average fuel use of 11.4 litres per 100 km (ABS SMVU 2001 estimate), a **fuel levy of about 12 cents per litre** is warranted**.**

An outline of the major external costs of motor vehicle use and older estimate of a 'road deficis' follows. This excludes an earlier estimate of road congestion costs in major cities of about $12.8 billion in 1995 (BTRE, 1999)[19];

i. Road crash costs were estimated by the BTRE (2000) at $15 billion (bn) in 1996. Less congestion costs it was $13.5 bn. Only about $8 bn was covered by insurance

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[14] Australian Taxation Office, Taxation Statistics 2003-04 which notes inter alia companies claiming $7.5 billion motor vehicle expenses (assume taxed at 30 %), and individuals, partnerships and trusts claiming about $11.1 billion (assume taxed at the average personal rate of 23 %),

[15] BTRE 2005 *Health Impacts of transport emissions in Australia: Economic costs* Working paper

[16] Kunzli N, Kaiser R and Medina S, Public health impact of outdoor and traffic related air pollution: a European assessment, *Lancet* Vol 356, Sept 2 2000)

[17] BTRE 2003 *Urban pollutant emissions from motor vehicles: Australian trends to 2020*

[18] Laird P, *Revised Land Freight External Costs In Australia,* Australasian Transport Research Forum 2005

[19] BTE 1999 Urban transport - looking ahead

in 1997-98 (Laird et al 2001[20]); leaving about $5.5 bn being a cost to the wider community.

ii. Health related costs from the effects of air pollution from motor vehicles with mid-range estimates for the year 2000 of the BTRE as $2.6 billion (capital cities as above plus $0.3 billion for regions);

iii. The cost of noise from all motor vehicles in urban areas as $0.7 billion, as per a low range estimate of the Bus Industry Confederation (2001);

iv. Net taxation refunds for motor vehicle use of $4.8 billion in 2003-04 as above;

v. A $1.9 bn greenhouse gas cost in 2004 (at $25 per tonne);

vi. An annual $0.8 bn non-tariff automobile industry assistance programme (ACIS);

These and other approximate cost estimates (including Toll Rebates in NSW and the formed Queensland Fuel Subsidy) summed up to some $17.7 billion. Road system costs in 2001-02 were about $8 billion a year and road vehicle specific revenues (excluding stamp duty) to Government in 2001-02 were about $12.7 bn (BTRE, loc cit). Hence, excluding congestion costs, a case can be made that there is a 'road deficit' that was about $13 billion per year.

In regards to the costs of accidents involving motor vehicles it can be argued that some, but not all of these costs fall on other road users. Thus, the percentage of road crash costs that should be regarded as an external cost is open to question. Hence, the estimate of 'road deficit' of about $13 billion per year is also open to question. However, treating external costs as zero is not a satisfactory policy option.

1.2.1 A second estimate

In regards to hidden costs, Prof. John Stanley[21] has estimated, after taking into account fuel excise and annual registration charges, but not including road congestion, a 'road deficit' of $14 billion a year.

Road congestion costs are now in the order of $10 billion a year.

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[20] Laird, P Newman, P Bachels, M and Kenworthy, J (2001) *Back on Track: Rethinking Transport Policy in Australia and New Zealand* UNSW Press

[21] Australian Financial Review, 24 January 2011 *Roads lobby has it all wrong.* See also http://www.mtf.org.au/Events-MTF/Transport-of-Economics-Forum-June22nd-2010.aspx

2. Road user pricing for heavy trucks - did the Productivity Commission get it right?

Under a CoAG generated process, the Productivity Commission was directed in February 2006 to hold an inquiry into road and rail freight infrastructure pricing. This followed considerable difficulties experienced over many years by government in leading reform in the area of road pricing of heavy vehicles, and, the increasing need for Australia as a nation to make more effort in the provision of 'fit for purpose' transport infrastructure.

In March 2006, Australia's Federal and State transport ministers declined to adopt a benign third determination by the National Transport Commission (NTC) of charges for heavy vehicles. This was followed in May 2006 with a Federal budget granting an additional $2 billion in road funding and a $1.2 billion concession in road pricing for heavy trucks.

There appears to be three notable broad groups of estimates for road system costs attributable to heavy trucks:

- ***Conservative or NTC*** - as per the National Road Transport Commission (NRTC) first and second determinations and the NTC third determination.
- ***Intermediate*** - including the former Inter-State Commission findings[22] during the 1980s, the 1990-91 Over-Arching Group (OAG) recommendations and NSW permit fees for heavier semitrailers and all B Doubles in use to 30 June 1996.
- ***High, or "user pays"*** - including the Bureau of Transport and Communications Economics (BTCE) 1988 report[23] noted in the draft report of the Productivity Commission, McDonell's methodology (NSW) (see for example, this writer[24]), and ongoing New Zealand Road User Charges.

When announcing the NRTC first generation charges in 1992, the chairman, the late Gordon Amadee, conceded they would not be "user pays" as this would not be tenable[25]. The costs to the NSW Government of implementing the then new NRTC charges (as of 1 July 1996) was over $60 million per year and NSW annual permit and registration fees of $12,650 a year in 1989 for an 8 axle B-Double were slashed to $5500. With Consumer Price Indexation, the 1989 NSW B-Double fee would in 2007 be about

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[22] Inter-State Commission (1986) Cost recovery arrangements for interstate transport, to (1990) Road use charges and vehicle registration: a national scheme Canberra

[23] BTCE (1988) *Review of road cost recovery*, Canberra

[24] Laird PG *Freight transport cost recovery in Australia*, Australasian Transport Research Forum, Gold Coast

[25] Sydney Morning Herald April 13, 1992 "Recession puts truck plan off road."

$20,500 pa. This is almost three times more than the 2007 NTC $7426 pa for an 8 axle B-Double. Subsidies are one reason why the number of large B-Doubles has grown so rapidly in recent years, as noted in the draft report — up from about 700 in 1997 to more than 6000 now. The difference between road system costs attributable to articulated trucks under the 2005 NTC model and using Macdonell's Methodology is approximately $1.5 billion per year.

In 1992, the Industry Commission (IC)[26] had no doubt that the NRTC charges subsidized the heavily loaded big trucks that haul long distances each year. As the IC 1992 Annual report noted, the NRTC charges would distort road-rail competition as rail reform took place. After 15 years of rail reform following the formation of National Rail in 1992, Australia has now reached the point where such competition for freight is being distorted. However, the final report of the Productivity Commission on road and rail freight found that with the exception of subsidies to the operations of many B-Doubles, the current charges are about right.

2.1 Road freight externalities

Externalities, including air pollution in cities, and accidents involving both articulated trucks and freight trains were considered by the Productivity Commission. These environmental and social costs are not all internalised and some 'polluter pays' and other charges are warranted with the proceeds being applied to infrastructure upgrades. Although articulated trucks are driven about three per cent of all vehicle kilometres, about one road fatality in ten involves an articulated truck. In most cases, this is not the fault of the truck driver.

Most fatalities involving articulated trucks are on roads with speed limits exceeding 80km/h. Worse still, on the National Highway System in NSW, about one road fatality in three involves an articulated truck. More information on heavy vehicle safety is given in a report released by the NSW Motor Accidents Authority[27]. The May 2006 report

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[26] Industry Commission (1992) Annual Report for 1991-92 page which held as a result of the NRTC charges *The result is that some vehicles - the heaviest travelling long annual distances - will meet less than 20 per cent of their attributed costs. ...The charges, as recommended, will therefore potentially distort the long-haul freight market as rail reforms take effect."*

[27] 2000 *Report of Inquiry into Safety in the Long Haul Trucking Industry*

of the General Purpose Standing Committee No. 4 of the NSW Legislative Council on Pacific Highway Upgrades notes that many people do not like seeing highways and roads overrun with big trucks – even on upgraded roads.

Energy efficiency and oil vulnerability issues affecting the transport of people and freight are identified in a report released 7 February 2007 of the Senate Rural and Regional Affairs and Transport Committee[28].

2.2 Removing impediments to rail freight

The Commission's draft report did not address in detail the speed-weight restrictions that reduce rail's efficiency and competitiveness in moving freight. The track linking Australia's three largest cities is substandard with some inadequate capacity. In many cases, it is simply not fit for current tasks let alone proposals under "Twice the Task" for rail to transport much more of the nation's freight.

As observed in numerous reports[29], the state of the track linking Australia's three largest cities is "***substandard***". Trains going from Melbourne to Sydney turn 36 circles to the left and 36 circles to the right - 72 in all as they traverse 'steam age' aligned track with excessive curvature and extra length. The NSW North Coast line has worse alignment.

The branch lines in NSW are a national disgrace.

The Commission's final report correctly notes poor track is due to past under-investment over many decades. It remains a challenge to policy makers to articulate a way forward to get the public and/or private investment of the rail network in Australia's South - Eastern corner up to standard.

3. Greenhouse Gas emissions - impacts of a carbon tax ?

In regards to various estimates for the costs of greenhouse gas emissions, a value of $25 per tonne of carbon dioxide equivalent (CO2e) was supported by several writers (eg Quiggin[30]) and is similar to a value of $NZ30 per CO2e tonne used in the past by

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[28] Report of the Inquiry into Australia's future oil supply and alternative transport.

[29] The Prime Minister's Task Force 1998 report on revitalising rail, the House of Representatives Standing Committee on Transport and Regional Services 1998 report *Tracking Australia* (and evidence to its current inquiry), this Commission in its 1999 *report on rail reform*, and more recently Engineers Australia infrastructure report cards.

[30] Quiggin J (1998) Taxing times: A guide to Australia's tax debate, UNSW Press

Transfund New Zealand[31]. A BIC [32](2001) recommendation was for a tax using $40 per tonne of CO2e, with their view that this estimate may prove to be conservative. Greenhouse has emissions are discussed by the Productivity Commission in their draft freight report (on page 6.16-18 and Appendix C) with data showing that at $10 per tonne CO2e, line haul road freight would accrue climate change costs of between 0.06-0.08 cents per net tonne km. For Sydney - Melbourne line haul road freight, the mid range is then about $0.60 per tonne and for rail is about $0.25 per tonne of freight.

Carbon pricing is now set at $23 per tonne of CO2e. At $23 per tonne CO2e, this is respectively $1.38 (road) and $0.57 (rail).

For petrol use in cars, using a factor of 1 litre of petrol directly emits 2.4 kg of CO2e[33], at $25 per tonne, a **fuel levy of 5.5 cents per litre** is warranted**.**

Australia has the highest road freight per capita in the world (Austroads loc cit) in terms of net tonne-km per person) and hence the highest greenhouse gas emissions from freight movements per capita in the world (due to road freight being an energy intensive way of moving freight).

In reducing greenhouse gases, one can take a view that each sector should be required to 'pull its weight'. In the transport case, imposition of a charge of $23 per tonne is supported with the proceeds going into upgrading land transport infrastructure that will reduce oil use and greenhouse gas emissions in land freight transport.

4. Road pricing policy options

A BTRE 2002 report[34] gave some 11 groups of measures to reduce vehicle kilometres travelled (VKT), nine measures to reduce emissions per VKT, four road pricing measures (mass-distance charges for heavy trucks, tolls, internalising transport externalities and emission charging), carbon taxes and tradable permits. Optimal road pricing was held to offer the best way forward.

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[31] Austroads (2000) Australia Valuing emissions and other externalities: A brief review of recent studies

[32] Bus Industry Confederation (2001) *Getting the Prices Right: Policy for More Sustainable Fuel Taxation for Road Transport in Australia* Submission (by Mr John Stanley) to the Commonwealth Fuel Taxation Inquiry.

[33] AGO Factors and Methods Workbook, Department of the Environment and Heritage, December 2006 page 10

[34] Bureau of Transport and Regional Economics (2002) *Greenhouse policy options for transport 2020* Report No 105

This view was shared by a NSW Inquiry[35] -"*The thinking underlying the support for road use pricing is that road access is currently 'too cheap' (as distinct from the general cost of motor vehicle use), as motorists are not directly bearing all of the costs associated with their decision to make a journey. For example, driving a vehicle is associated with costs such as congestion, road wear and tear, pollution and accidents*."

A National Strategy for Lowering Emissions from Urban Traffic with a National Action Plan, as approved by the Australian Transport Council in August 2002, still awaits implementation. To quote in part from the communique for this meeting: "*…transport costs will have moved from predominantly fixed to predominantly variable costs. This outcome will address cost variations in transport modes and ensure that transport users experience more of the true cost of their travel choices*."

This could well include congestion pricing. The Productivity Commission's 2005 report into energy efficiency had a sole recommendation on transport: *"Australian governments should investigate the feasibility of introducing congestion pricing where it is likely to improve the economic efficiency of road use (including greater energy efficiency). It may be appropriate for such a study to be incorporated in a wider examination of efficient road pricing or in a review of passenger transport reform as a whole."*

Britain, faced with increasing road congestion, moved to a congestion charge in London which has since been increased. More recently, the Eddington Report released December 2006[36] reported that road tolls could benefit the economy to the tune of £28bn a year. With road charging, drivers would pay more to use roads when they were busy or more congested. The report was commissioned in 2005 by Chancellor Gordon Brown and written by former British Airways chief Sir Rod Eddington to examine options for modernising the UK transport network and commented on road pricing, road building, rail and airport investment, as well as the planning system. His report identifies three strategic transport priorities - congested and growing city catchments, "inter-urban" corridors and important international gateways showing signs of congestion and unreliability. The UK government has already indicated it will press ahead with trial road-pricing schemes.One motivation is that without change, congestion could rise by 25% by 2015 in big cities.

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[35] (NSW Ministry for Transport (2003) Ministerial Inquiry into Sustainable Transport (Parry Inquiry via www.transport.nsw.gov.au)

[36] http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/01_12_06_eddingtonreport.pdf

4.2 A ten point transport pricing plan

Improved road pricing to remove large hidden subsidies from motor vehicle operations is necessary to improve road vehicle demand management. One approach was given in 2004 in a submission (#186) to the House of Representatives Environment and Heritage Committee's inquiry into Sustainable Cities which proposed a ten point transport pricing plan along the following lines.

i. Re tolls

A. **Remove toll rebates in Western Sydney, which is a costly scheme to administer.**

B. Reinstate tolls at Berowra and Waterfall, with the proceeds being used to expedite long-overdue improvements of both the Pacific and Princes Highways.

ii. Remove the Queensland Fuel Subsidy Scheme, at least from South East Queensland. [This has since been done].

iii. Impose a congestion charge for access to the Sydney and Melbourne CBDs. It works well in London. And/or impose an environmental fuel levy for motor vehicle use in the Greater Metropolitan Areas of state capital cities and Canberra.

iiii. Restore fuel excise indexation, with the additional revenue going into improved transport infrastructure. To ensure best use of funds, replace road funds (as enjoyed by the NSW Roads and Traffic Authority) by transport funds (as per Western Australia, New Zealand and now with AusLink).

v. Ensure that the further determinations of heavy vehicle road user charges by the National Transport Commission recovers - at least the populous zone - the full road system costs from heavy articulated trucks, B-Doubles and road trains. Ensure that additional revenue is directed towards not only National Highway System maintenance (to compensate for changes under AusLink), but rail track and improved intermodal facilities.

vi. Increase annual registration fees for the heavier four wheel drive vehicles.

vii. Have the Productivity Commission examine urban transport.

viii. Increase rail fares, with all proceeds going into a better rail system.

ix. Improve land transport data, with publication of accurate, comprehensive and up-to-date information on all modes of transport, with details of energy use and greenhouse gas emissions.

x. Ensure that major airports and seaports are not in receipt of hidden subsidies.