



AUSTRALASIAN RAILWAY ASSOCIATION INC

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Submission to Treasury Review on Australia's Future Tax System

I refer to the request for submissions to the Treasury Review on Australia's Future Tax System. This submission is made by the Australasian Railway Association (ARA) on behalf of its membership.

The Australian tax system should be reformed to encourage more economically, environmentally and socially sustainable forms of transport.

Australia's existing tax arrangements for transport are in urgent need of reform. They are complex, economically inefficient and distort investment decision making. Reforms to improve the existing transport tax system are welcomed by the railway industry.

The rail industry recommends:

1. Removing FBT incentives for non-sustainable fuel use and provide more incentives for promoting public transport use.
2. Early introduction of the mass-distance-location charging for large, long distance trucks to ensure all costs generated by trucks are passed through.
3. Accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure.
4. Neutralise the negative effects of the Carbon Pollution Reduction Scheme on the transport system.

The rail industry looks forward to continuing to work co-operatively with the Australian Government Treasury on issues relevant to the rail industry. It would be greatly appreciated if in future you could liaise with the ARA's Director Policy, Brett Hughes on (02) 6270 4508 or bhughes@ara.net.au and our other rail industry members throughout Australia.

Yours sincerely

Bryan Nye
Chief Executive Officer



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Key points

The rail industry submits that the Australian tax system should be reformed to encourage more economically, environmentally and socially sustainable forms of transport.

Australia's existing tax arrangements for transport is in urgent need of reform. It is complex, economically inefficient and distorts investment decision making. Reforms to improve the existing transport tax system are welcomed by the railway industry.

The rail industry recommends:

- 1. Removing FBT incentives for non-sustainable fuel use and provide more incentives for promoting public transport use;**
 - review all taxes and subsidies that support car use, in urban and rural areas,
 - signal a decision to progressively save tax revenue for redirecting to a fund for improving public transport (and sustainable urban transport),
 - remove the FBT concession for cars, fuel and car parking; first, and within two years, remove the statutory formula or any incentive to increase annual kilometres driven in the vehicle.
- 2. Early introduction of the mass-distance-location charging for large, long distance trucks to ensure all costs generated by trucks are passed through.**
- 3. Accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure.**
- 4. Neutralise the negative effects of the Carbon Pollution Reduction Scheme on the transport system:**
 - equalize the offsets provided to road transport by supporting rail transport,
 - use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting railways.

1. Introduction

The Australasian Railway Association (ARA) is a member-based association that represents the interests of the rail sector in Australia and New Zealand. The ARA represents all railways interests in Australia including freight and passenger, public and private, urban and regional railways, as well as manufacturers and contractors.

The ARA assists its members by providing relevant information on a wide range of topics affecting the rail industry including rail research, technology, safety, operations and infrastructure. The ARA is also actively involved in the development of rail industry policy to ensure the industry's views are represented in government decision making.

Contextual background on transport challenges and government policy is provided in the attachment, which describes the serious need for change in transport and government policy requirements.

1.1 Rail Industry Background

In 2008 the rail industry provided jobs for over 51,800 employees directly¹. The industry contributed 0.54 per cent of total Australian GDP amounting to \$4.86 billion in value to the Australian economy². Further economic value and jobs are provided in the support industries, such as rolling stock manufacture, track and equipment suppliers, and the tourist sector. Significant parts of this workforce are employed in regional Australia.

Rail plays a key role in every Australian's life. At the moment, in Australia rail carries 183 billion tonne-km or 53% of the land freight task and 616 million public transport passengers per annum³.

Rail offers a significant cost benefit over road transport. For example, rail moves inter-capital city freight for a cost of 3.6 cents per net tonne kilometre compared to a cost of 6.3 cents for road⁴. In addition, rail offers significant benefits in reducing the costs of accidents, environmental damage and congestion.

Despite the benefits of rail transport, its mode share for most tasks is not increasing and is decreasing in some critical areas such as east coast intermodal freight and grain transport.

¹ Australian Bureau of Statistics, 2008, *Labour Force, Australia, Detailed - Electronic Delivery Nov 2008*, Cat. no. 6291.0.55.003, Canberra.

² Australian Bureau of Statistics, 2005, *Australian Industry Experimental Estimates Industry Performance by ANZSIC Class*, Australia, 2002-2003, Canberra. More recent figures are unavailable.

³ Bureau of Infrastructure, Transport and Regional Economics, 2007, *Australian Transport Statistics*, Canberra

⁴ Australian Railway Association) 2004, *Rail and road costs*, unpublished research undertaken by Port Jackson Partners.

1.2 Taxes, Transport and the Environment

Australia faces significant environmental challenges in the 21st century and climate change is perhaps the most significant environmental risk to the future wellbeing of Australians⁵.

Integrating sustainability into Australia's transport systems is especially important in the face of climate change and a low-carbon future. Transport contributes 14% of Australia's total greenhouse emissions caused by our reliance on the use of cars (for passenger transport) and trucks (for freight), and is one of the fastest growing sectors of greenhouse emissions⁶.

Economic development must be undertaken in an environmentally sustainable way and taxes should provide means of improving environmental amenity and detract from environmental outcomes through the incentives it creates. There are opportunities for the Government to replace existing taxes with more targeted taxes and charges that promote the efficient use of transport networks and at the same time reduce the social costs of motoring such as air pollution, greenhouse gas emissions and damage to publicly funded roads.

However, at the Commonwealth level, there appears to be a significant conflict between the Governments' stated policy objectives in climate change and urban transport, and the impact of Government taxes and regulations. Government taxation has a significant misleading role in influencing choices between transport modes. These are most evident in transport tax policies that distort consumer decisions between public and private transport, as well as road, rail and air travel – including the Fringe Benefits Tax regime (FBT) and the proposed Carbon Pollution Reduction Scheme (CPRS).

This submission describes the four most critical policy issues facing the railway transport sector:

- Fringe Benefits Tax (FBT);
- heavy vehicle charges;
- Carbon Pollution Reduction Scheme (CPRS); and
- accelerated depreciation for rolling stock.

2. Fringe Benefits Tax (FBT) Incentives

2.1 Background to FBT Legislation

The Fringe Benefits Tax Assessment Act was introduced into the Federal taxation system in 1986. It was designed to overcome problems with employees valuing their employer provided non-cash benefits under s26 (e) of the Income Tax Assessment Act (1936). Since 1986, the reform of FBT has been the subject of considerable debate, with particular attention given to its complex compliance requirements

⁵ Garnaut, R. 2008, *The Garnaut Climate Change Review. Final Report*, Cambridge University Press, Melbourne.

⁶ Transport is Australia's third largest source of emissions. See Department of Climate Change, *Transport Sector Greenhouse Gas Emissions Projections 2007*, February 2008, p1.

including administration, uncertainty and errors, inequalities and economic inefficiencies⁷.

2.2 FBT and Motor Vehicles

The most popular form of non-cash benefit to employees is the car⁸. In Australia, there are two methods to derive taxable value of the private use of motor vehicles; the Statutory Formula Method and the Operating Costs Method. The Statutory Formula Method is the most popular, which was adopted because of its simplicity. The value of the car for FBT purposes is its cost multiplied by a ‘statutory fraction’ which depends on how far the car is driven in the relevant tax year. The Statutory Fraction, and hence the taxable value of the car benefit, reduces as the number of kilometres driven increase (Table 1).

Table 1: Distance thresholds for the FBT statutory fraction

Distance driven	Statutory Fraction Rate
Up to 14,999 km	26%
15,000km to 24,999km	20%
25,000km to 39,999km	11%
More than 40,000km	7%

FBT treatment of car benefits reduces the overall cost of car ownership and provides employees with an incentive to drive additional kilometres to reduce the amount of FBT payable. The FBT arrangement introduces two significant distortions:

- it provides significant incentives for people on higher income to use cars instead of public transport; and
- it encourages unnecessary vehicle usage to meet the distance requirements of the tax provisions.

Table 2 shows that for a car worth \$30,000, the tax savings for driving further are considerable. For instance it shows that if a car is driven 15,000 per annum, then a tax discount of 6 per cent is obtained.

⁷ Warren, N. 2006, *Fringe Benefit Tax Design: decision time*, Institute of Chartered Accountants in Australia, Sydney, p.8.

⁸ The most recent comprehensive set of Australian Taxation Office data *Taxation Statistics 2005-2006* shows the in the 2006 FBT year cars were the most popular form of fringe benefit as 52,570 vehicles were provided.

Table 2: FBT liability using statutory formula method on a \$30,000 car⁹

Distance	Statutory Rate	FBT Payable ¹⁰
Up to 14,999 km	26%	\$7,489
15,000km to 24,999km	20%	\$5,760
25,000km to 39,999km	11%	\$3,168
More than 40,000km	7%	\$2,016

Table 3 provides a snapshot of savings for employees who choose to pay with after-tax monies (i.e. the “Contribution Method”). At the 15,000 kilometre band a tax saving (based on arbitrage) can be obtained. The incentive for employee to drive for a discount is considerable.

Table 3: FBT and PAYG cost savings at 15,000 kilometres per annum¹¹

	Statutory Method			Contribution Method	
	Statutory Rate	FBT cost at 6.5%	Savings	PAYG cost at 31.5%	Savings
Up to 14,999 kms	26%	\$7,489		\$2,457	
15,000 - 24,999kms	20%	\$5,760	\$1,728	\$1,890	\$567

FBT treatment of car benefits indirectly encourages increased greenhouse gas emissions, pollution and congestion through increased car use. Road transport is by far the largest contributor to transport emissions, accounting for 88 per cent of total emissions in 2005.

Greenhouse gas emissions from total transport are projected to increase by nearly 30% between 2005 and 2020 and Table 4 shows actual and projected emissions from the transport sector from 1990 (base year for the Kyoto Protocol) to 2020.

Table 4: Emissions from the Transport sector (Mt CO_{2-e})¹²

	1990	1995	2000	2005	Kyoto Period	2020
Cars	35.2	37.7	41.3	44	45.7	49.3
Total Road	54.3	58.9	65.9	71.1	76.5	88.8
Rail	1.7	1.6	1.6	2.1	2.6	3.3
Domestic Aviation and Shipping	5.9	7.7	7.4	7.5	9	11.5
Total Transport	62.1	68.2	74.9	80.8	88.1	103.6

⁹ Kraal, D, Yapa. P.W.S and Harvey, D.2008, ‘The Impact of Australia’s Fringe Benefits Tax for Cars on Petrol Consumption and Greenhouse Emissions’, Australian Tax Forum, vol. 23, p 194.

¹⁰ The statutory formula for calculating FBT liability is: value of car x Statutory Fraction x Gross-up rate days Held/Days in FBT year x FBT rate. For a \$30,000 car with 13,000 kms per annum and held for 365 days, the calculation is : \$30,000 x 26% x 2.0647 x 365/365 x 46.5% = \$7,489

¹¹ Kraal, D, Yapa. P.W.S and Harvey, D. 2008, p 194.

¹² Department of Climate Change 2007, “Transport Sector Greenhouse Gas Emissions Projections”, Canberra, p.3 & p.11.

Table 5 shows the greenhouse gas emissions cost that come with increased mileage. If an average car (with fuel economy of 11 litres/100kms) travels 15,000 kilometres per year, it emits 4.4 tonnes of carbon dioxide¹³.

Table 5: Estimated annual greenhouse emissions for an average car¹⁴

Kms	Litres (Petrol)	CO ₂ ¹⁵
15,000	1650	4.4 tonnes
3,700	407	1 tonne

Increasing road transport in Australia, in many circumstances, has imposed high costs to the Australian economy, community and environment. Overall total and social environmental costs of transport in Australia are estimated at \$52 billion or 5.6% of GDP in 2005, before including congestion costs¹⁶. Of this, only a small proportion is due to rail transport despite it providing a substantial proportion of the transport task.

In spite of the dominance of road transport in Australia, there is substantial evidence that rail is an effective mode of transport which offers compelling benefits to the Australian economy, community and environment including:

- relieving road congestion in metropolitan areas, reducing delays for drivers and freight transport;
- providing relief from rising fuel costs particularly for households in the ‘mortgage belt’ middle and outer suburbs that are most impacted by rising petrol prices; and
- reducing transport emissions that contribute to climate change emissions and providing communities with safer and healthier modes of transport.

However, retention of existing FBT arrangements favouring cars over public transport restricts the potential of Australia’s public transport system to help Australia reduce car dependency and transport greenhouse gas emissions.

2.3. Overseas Actions

Overseas countries are actively pursuing increased public transport use including changing the taxation arrangements to promote public transport.

United Kingdom

In 1999, the UK Inland Revenue introduced a ‘Green Tax’ package where some subsidies were removed. The European Union undertook a legislative review of

¹³ For a calculator to determine tonnes of greenhouse per kilometres driven, see <http://www.greenfleet.com.au/ssl/treetotaller.htm>.

¹⁴ Kraal, D, Yapa. P.W.S and Harvey, D., (2008), p 195.

¹⁵ Average car with fuel economy of 11 litres/100kms) travelling 15,000 kilometres per year, emits 4.4 tonnes of CO₂. If the travel is reduced, by 3,700 kilometres/pa, CO₂ emissions are reduced by 1 tonne and \$525 (407 litres x \$1.29) of petrol is saved.

¹⁶ CRC for Rail Innovation, 2009, *Transforming Rail: A Key Element in Australia’s Low Pollution Future*, Final Report, Brisbane, p1.

‘drivers’ of unsustainable transport practices, and this approach could be applied in Australia, as it has been able to identify direct and indirect discrimination.

USA¹⁷

Legislation was introduced in 1984 to allow eligible employers to give employees up to US\$15 monthly in tax-exempt public transport benefits to offset commuting expenses. By 2008 this benefit had increased to US\$115 per month. Employers get a tax deduction for their expense and save on payroll taxes. When first introduced, public transport patronage increased 25% at participating workplaces and in some areas 30% of participants were new users of public transport. In 2008, a bill was introduced to the US Congress to amend the Internal Revenue Code to allow employers a 50% refundable tax credit of the cost of transit passes provided to employees tax-free.

Canada¹⁸

‘Over the past decade, a coalition of business, labour, health and environmental groups has urged Canada’s Federal government to give tax-exempt status to employer-provided public transport benefits. In 2005, the Canadian federal budget identified tax-exempt public transport benefits as an environmental measure that would be considered, subject to further assessment of its environmental effectiveness, fiscal impact, economic efficiency, fairness and simplicity’.

Independent research and analysis commissioned by the Canadian Urban Transit Association concluded that: ‘among the notable results expected by 2016 are a projected increase in commuter public transport patronage of 8.3% to 31% and a net economic benefit of C\$385 million to C\$1.4 billion per year that would vastly outweigh the loss in federal tax revenues’.

2.4. Recommendations

The rail industry recognizes that there may be valid reasons for FBT differentiation and advantages. However, in urban areas the structure of taxes and charges can lead to perverse outcomes for the economy and the environment. There are benefits in altering these tax provisions to minimise the incentive for car use in urban areas.

It is important to distinguish between the statutory formula with its regressive, step-wise rates that ‘reward’ drivers with lower rates as their travel increases, and the removal of a FBT concession in total.

A more recent case has been made for a more thorough review and total removal of tax incentives to drive. Arguments for a thorough review and progressive removal include¹⁹:

- the tax concession reaped from a car and fuel would be many orders of magnitude greater than for an annual public transport ticket or an expensive commuter bicycle, accessories and annual maintenance costs;

¹⁷ CUTA (Canadian Urban Transit Association), 2005, *Tax-Exempt Transit Benefits: New Insights Make the Case*, Issue Paper 15, October, P.2.

¹⁸ Ibid, pp. 2-4.

¹⁹ Ryan, M. 2007, *Some greenhouse-friendly tax reforms*, Tax Policy Journal, vol.4, Tax Payers Research Foundation.

- the public transport network is spatially inequitable and thus a tax concession for public transport tickets would reinforce this spatial inequity;
- the operation of workplace tax concessions for car use shapes the organizational culture towards car driving, or at least reinforces the prestige associated with driving a car to work; this cultural dynamic at the workplace undermines ‘workplace travel plans’ as sustainability initiatives²⁰; and
- the deficit of Commonwealth tax revenue is \$1 billion per annum, and there is potential benefit in directing this sum toward a public transport infrastructure fund.

The rail industry is philosophically opposed to the notion of FBT concession for cars. However, if Commonwealth Government decides to retain this concession, then the rail industry seeks that the Government provide employees with concessions or other sustainable travel incentives for using public transport to balance the inequity and its perverse outcome on the transport system.

The rail industry recommends:

- a review of all taxes and subsidies that support car use, in urban and rural areas;
- a decision to progressively save tax revenue for redirecting to a fund for improving public transport (& sustainable urban transport); and
- remove the FBT concession for cars, fuel and car parking; first, and within two years, remove the statutory formula or any incentive to increase annual kilometres driven in the vehicle.

3. Heavy Vehicle Charges

3.1. Inaccurate Road Charges

The rail industry concurs with the National Transport Commission (NTC), the Productivity Commission (PC), the Australian Transport Council (ATC) and others that conclude that heavy vehicles are currently undercharged in Australia. Despite the recent important improvements to the heavy vehicles charging regime, significant faults remain. These inaccuracies must be corrected immediately and permanently.

The differences between road and rail freight transport pricing were summarised by the Productivity Commission as shown in Table 6 below.

The current charges result in the undercharging of some heavy vehicle types and usage, notably high utilization vehicles which results in cross-subsidies and under recovery of costs. Heavy vehicles do not pay for costs imposed on others such as noise, pollution and congestion delays. Heavy trucks only pay marginal cost for use of goods, whereas freight rail pays average cost plus a profit margin²¹.

²⁰ Reported to the 2000 Senate inquiry by the Transport Program at University of New South Wales.

²¹ Productivity Commission, 2006, *Road and Rail Freight Infrastructure Pricing*, Report no. 41, Canberra.

Table 6: Road and rail charging arrangements

Mode	Cost recovered	Allocation of costs	Mass - Distance Charge	Method of charging	Cross-subsidisation	Charges set by:	Charges paid to:	Externality Charges
Road	Past years capital and maintenance costs as provided by state gov'ts and ABS survey for local gov'ts. 21% of expenditure recovered from heavy vehicles.	Averaged across the sector based on ABS road use data.	No.	Registration fee and fuel based excise charge.	Yes with other road users and between truck types eg 80% recovery from B-Doubles.	Registration by NTC through heavy vehicle charging regime. Fuel excise by Commonwealth.	Registration charges to States. Fuel excise to Commonwealth. Neither charge is hypothecated to road costs. No dividends.	Not charged. Costs estimated at between \$4.60 to \$10 per 1000ntk.
Rail	Full economic costs including depreciation and rate of return. Not always charged as need to peg charges to road.	Specific to the individual train.	Yes.	Flag fall and charge for gross-tonne kms.	No.	Track Manager within an access regime. Current charges often below ceiling levels.	Track Manager. Dividends to owners.	Not charged. Costs estimated at between \$0.80 to \$1.60 per 1000ntk.

Heavy vehicle charges which do not recover costs result in economically inefficient transport systems. In particular this means:

- others paying for truck use, or otherwise Government revenue is reduced;
- more road freight transport; more trucks and less rail transport;
- higher greenhouse gas emissions, congestion and health impacts; and
- greater demand for road construction and maintenance.

Continued under-charging of road transport attracts freight to road resulting in more trucks on major highways and less freight on more safer and more environmentally efficient rail transport.

3.2. Recommendations

The rail industry proposes that heavy vehicle charges should reflect social marginal costs in a way that reflects road use (mass/distance/location). The rail industry is encouraged by the discussion in the report about the potential for introduction of mass-distance-location charging for heavy vehicles (see table 7)²². The rail industry supports the early introduction of mass-distance-location charging currently being widely introduced in Europe.

Table 7: Reforms for heavy vehicle charging²³

	Current Charging	Reform Plan
Types of Road Charges	Registration charges (plus other charges e.g. stamp duty, insurance) Fuel charge (via "road user charge")	Charge based on: - mass of vehicle - distance travelled - location and type of roads used
Revenue Collection and Spending	State government collects registration charge Federal government collects fuel charge	Future institutional arrangements for a mass-distance based charging system are still to be determined Future arrangements would be based on linking revenue from roads to investment

4. Carbon Pollution Reduction Scheme (CPRS)

4.1. Road Transport Offset

The rail industry supports the introduction of an efficient and effective CPRS into the Australian economy. However, the decision to exempt 85% of the transport sector from CPRS by applying a carbon price freeze on cars and road heavy vehicle passenger and freight operators is inconsistent with the objective of the CPRS. Passenger vehicles (3 years) and road freight transport (1 year) will have their carbon cost offset for the introductory period, but the offsets will remain permanently.

²² National Transport Commission, 2009, *Freight Rail Productivity Review Draft Position Paper*, Melbourne, p.35.

²³ National Transport Commission (2008), *Submission to AFTS Architecture*

The proposed CPRS shields motorists from the effects of the price signal at the expense of public transport users, which will further disadvantage rail use in Australia, despite rail's environmental advantages and higher carbon efficiency. This arrangement introduces several market distortions which include:

- car drivers' costs will not change, but rail public transport costs will rise because of the price increases of electricity produced by coal;
- car owners' CPRS costs are discounted by tax rebates or payment by others (e.g. when used for business purposes);
- private car users will have no incentive to change to more environmentally friendly passenger rail and tram public transport; and
- CPRS charges are not market linked to public transport pricing or provision of infrastructure.

The changes in transport behaviour that the market price mechanism is intended to achieve cannot be effective if the market is distorted in these ways.

4.2. Recommendations

A substantive policy framework for addressing transport-related greenhouse gas emissions would acknowledge the role of rail transport and encourage modal shift to sustainable transport options, while expanding the capacity and reach of rail networks for public transport and freight. The government should:

- equalize the offsets provided to road transport by supporting rail transport; and
- use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting railways.

Specifically the rail industry recommends the following improvements to the CPRS:

- offset intermodal railways fuel to match heavy road transport;
- accelerate taxation depreciation for environmentally friendly rolling stock and infrastructure;
- provide a Climate Change Credit for freight forwarders who use rail for contestable freight instead of more emissions intensive transport;
- provide taxation incentives to use public transport, similar to those provided for motorists;
- allocate Climate Change Action Funds (CCAF) to rail investments; and
- allocate CCAF funds for programs to inform passenger and freight transport choices.

5. Accelerated Depreciation

5.1. The Aging Australian Rail Fleet

The locomotive and wagon fleet that is currently employed by the Australian rail industry is one of the oldest in the developed world. Unless commercial returns from the east coast intermodal business improve, this is unlikely to change²⁴. The average

²⁴ Australasian Railway Association and Booz Allen & Hamilton Consulting, 2007, *Sustaining Freight Growth on Rail – North South Corridor*, Canberra, p. 25.

age of diesel locomotives in Australia is over 30 years and half the wagons are more than 26 years old, while the average age of the USA fleet is 8 years. Moreover, diesel locomotives account for 88 per cent of the locomotive fleet in 2007, followed by electric locomotives (10 per cent) and XPT locomotives (2 per cent)²⁵.

This aging of the fleet is largely a function of the low or negative return on the cost of the new locomotives (about \$6 million each). The alternative of using rebuilt locomotives, while it fills a gap, is not a sustainable position in the long run. Ultimately further rebuilding and adaptation will also become uneconomic. Furthermore, failure to invest in new locomotives with the modern low-emission technologies that are being developed in the US and Europe will cost Australia the opportunity to reduce current locomotive greenhouse gas emissions by 40%.

As discussed at Section 3, with the currently distorted infrastructure pricing, rail freight especially east coast intermodal freight in Australia is unlikely to continue to offer return on both assets and investment. This situation will not provide the business case for industry, rail or end users, to invest for growth. If the current situation continues, rail will be forced to step aside from any intermodal services under 2000 kilometres haul length. The shortfall will be taken up by the road transport sector, with the associated massive increase in greenhouse gas emissions and loss of external economic benefits²⁶.

5.2. Recommendations

Sympathetic taxation arrangements will encourage the introduction of new technology to speed faster deployment of environmentally efficient investment. Accelerated taxation depreciation should be introduced for new, environmentally friendly locomotives and wagons, and for infrastructure within the rail industry. The classic example is the Government's move in the late 1980s to induce a younger shipping fleet for the Australian shipping industry. Capital grants were offered for new investment and accelerated depreciation. Accelerated depreciation was valid for five years; two years before the vessel hit the water and three years after. This scheme was argued to make Australian coastal shipping more cost-competitive than foreign ship and land transport²⁷.

In order to ensure the survival and ultimate growth of freight rail in Australia, the rail industry considers that it is necessary to:

- encourage train operators, leasing companies and other stakeholders to invest in new rail equipment, to take advantage of the more efficient, greener technologies that are now emerging;
- introduce accelerated depreciation schedules on existing and new locomotives and rolling stock would encourage the acquisition of newer equipment; and
- apply accelerated depreciation to rail infrastructure investment.

²⁵ Australasian Railway Association, 2008, *Australia Rail Industry Report 2007*, Canberra, p .20.

²⁶ Australasian Railway Association and Booz Allen & Hamilton Consulting, 2007, *Sustaining Freight Growth on Rail – North South Corridor*, Canberra, p.2.

²⁷ Gillies, P. and Cleworth, B. 2008, *Sea Freight in Australia and Competing Transport Modes: Taxation, Fiscal, and Other Policies affecting mode choice, and their environmental consequences*, Working Paper, Macquarie University, Sydney.

The financial benefits that accelerated depreciation schedules provide would encourage new capital purchases which would also have other social benefits with less pollution and greenhouse gas emissions from newer equipment. Newer equipment is also able to support high productivity trains, provide fuel efficiency gains and improve current equipment reliability.

These incentives have been carefully considered by the rail industry and are seen by the industry as providing a circuit-breaker to the present situation. The industry anticipates that they would be applied with commensurate governance and review processes so that the risk to Government is minimized.

6. Summary

The development of more comprehensive, efficient and effective passenger and freight rail transport networks is a matter of national importance. The rail industry submits that the Australian tax system should be reformed to encourage more economically, environmentally and socially sustainable forms of transport.

There are a number of transport tax policy issues that need to be addressed in order to grow the railway transport sector and maximize the benefits of railway transport to the Australian community.

Australia's existing tax arrangements for transport are in urgent need of reform. They are complex, economically inefficient and distort both investment decision making and travel behaviour. The current tax system supports much of the current road infrastructure charging arrangements and funding of road infrastructure by governments. Reforms to improve the existing taxation system to benefit transport are welcomed by the railway industry.

The rail industry recommends:

- 1. Removing FBT incentives for non-sustainable fuel use and provide more incentives for promoting public transport use;**
 - review all taxes and subsidies that support car use, in urban and rural areas,
 - signal a decision to progressively save tax revenue for redirecting to a fund for improving public transport (and sustainable urban transport),
 - remove the FBT concession for cars, fuel and car parking; first, and within two years, remove the statutory formula or any incentive to increase annual kilometres driven in the vehicle.
- 2. Early introduction of the mass-distance-location charging for large, long distance trucks to ensure all costs generated by trucks are passed through.**
- 3. Accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure.**

4. Neutralise the negative effects of the Carbon Pollution Reduction Scheme on the transport system:

- offset intermodal railways fuel to match heavy road transport,
- equalize the offsets provided to road transport by supporting rail transport,
- use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting railways.

ATTACHMENT

Background on Transport Policy Context

This section provides information about the transport context, particularly for railways.

1. Current Australian Transport

The serious deterioration in the performance of the transport system, which will occur in the foreseeable future, must be recognised. Australia is potentially at a watershed in Australian rail transport with a triad of unprecedented and unrelenting pressure that cannot be ignored:

- traffic congestion in urban areas;
- climate change and the imperative to stop global warming by reducing greenhouse gas emissions; and
- reduced liquid fuel availability resulting in fuel prices increasing at an unprecedented rate.

Any one of these pressures requires substantial changes to occur. All three of them together demand it. These pressures threaten the sustainability of the Australian community, environment and business. At the same time transport demand is increasing due to commodity exports, increasing GDP and increasing population.

The Issues Paper could be read to indicate that, with reasonable modification, the transport system can meet Australia's future needs with acceptable impacts. The reality is that the transport system will not have sufficient capacity in the infrastructure, rolling stock and vehicles, people and systems to meet future demand and adverse consequences will continue to rise. Australia needs a fundamentally different transport planning and decision making paradigm to address these issues.

Analysis of the transport system²⁸ shows that:

- transport fuel use and emissions are amongst the highest per capita in the world;
- more than 1600 people die on our roads and another 30,000 are injured annually;
- average fuel consumption is not decreasing;
- the financial cost of road crashes is over \$20 billion annually (the economic cost is much higher when suffering and other effects are accounted for, but these are too difficult to quantify, so they are ignored);
- traffic congestion in cities costs more than \$10 billion annually;
- it is estimated that transport emissions are responsible annually for
 - the deaths of over 1500 people a year, and
 - over 4,500 cases of asthma and other sickness (since these are 'central estimates' the figures could be 40% higher);
- the cost of death and sickness induced by transport emissions exceeds \$2.3 billion annually;
- personal transport times and costs are increasing as a proportion of available time and disposable income to the extent that transport is contributing to family pressure²⁹;

²⁸ Most of these indicators are from published Government reports including ATSB, BITRE WP63, and WP71, etc which can be provided as necessary.

- over three decades there has been no move towards more sustainable modes of transport, until the last two to three years; and
- fuel usage of passenger cars have not decreased for many years.

2. Future Australian Transport

Australia continues to improve its transport system, but even with these changes we can expect:

- by 2050 transport emission will comprise more than 66% of nation's entire greenhouse gas emissions target;
- transport congestion costs are increasing at a faster rate than traffic is increasing (a cause for concern in itself);
- in the 15 years to 2005 heavy vehicle congestion costs increased about 50%, while in the 15 years to 2020 it is estimated they will increase by an additional 120%, making a total increase of 230% over 1990 levels;
- traffic congestion in cities will cost \$20-30 billion annually by 2020; and
- road safety is not generally improving:
 - the number of road deaths is not decreasing,
 - the number of serious injuries caused by road crashes is rising (which ATSB has ceased reporting),
 - the number of deaths caused by articulated vehicles is increasing, and
 - the number of serious injuries caused by articulated vehicles is not decreasing.

Australia faces significant challenges in meeting transport outcomes including:

- transport capacity;
- greenhouse gases and other pollution;
- operation and infrastructure cost escalation;
- congestion and slowing urban travel speeds;
- vulnerability to liquid fuel availability and price;
- road crashes and health impacts of transport emissions; and
- deterioration of urban amenity increasing funding demands on Treasuries.

An efficient, effective, safe transport system is required to meet Australia's short and long term needs. Clearly, incremental changes alone will not achieve the target required and fundamental structural changes to Australian transport systems are essential. Compared with historical practice, passenger and freight rail must take a much larger proportion of land transport in Australia. To do so requires many and diverse industry and government activities at substantially higher levels than have occurred previously.

It is not evident that concurrent policy developments will be coherent. That is, one policy decision may be offset or undermined by another decision thereby diluting the value of a seemingly valuable intervention. Undeniably, incremental changes alone will not achieve the outcomes required, and fundamental structural changes to Australian transport systems are essential.

²⁹ See for example " *Vulnerability Assessment for Mortgage, Petrol & Inflation Risks & Expenditure*, Dodson & Sipe, Griffith Uni, 2008"

3. Transport System Development

The majority of transport has generally changed very slowly and incrementally for a variety of reasons. Once a system exists, it is very difficult to change it. People involved in an unchanging industry tend to repeat the past, and there have been few transport crises to demand change or quantum leaps in technology to drive change.

There are long time lags that occur in changing the transport system, so it is imperative that structural change commences as soon as possible, because significant effects of change will not be evident for several years. This occurs for several reasons:

- the long life of system elements (eg the average age of locomotives is over 30 years);
- the majority of the structure of transport which will exist in 2050 already exists;
- the inability to change fundamental physical arrangements such as track alignments and locations of intermodal terminals);
- the long time to implement new large transport projects (typically in the order of 10 years or longer); and
- the short term decision making of governments, business and the community.

There is a belief that market based systems will provide optimum business, community and environmental outcomes. While market based systems are a valid mechanism of choice, the reality is that market failures occur, or stakeholder preferences demand different outcomes, and various government or community interventions are required.

Australia has a history of transport system development determined by microeconomic evaluation based on free market principles. This basis has led the nation to its current position where adverse transport system effects (such as congestion, and pollution) are increasing faster than the amount by which transport is increasing. Clearly, future transport system developments must be based on future requirements, not on historical analysis or selective information which restricts the choice of solutions.

While AusLink moved towards more holistic and integrated transport development in principle, in practice there was little change in the decision making process. In addition, AusLink failed to address urban and regional transport issues, due to its focus on intercapital and selected nationally significant transport.

The rail industry proposes that the following principles should guide the development of transport policies and programs:

- there should be positive economic, social and environmental outcomes at all levels (not just overall);
- consequences should be equitable and fairly distributed;
- the business burden should be as low and possible;
- any perverse regulatory, market, social or environmental outcomes should be minimised; and
- compensatory mechanisms should be implemented where these principles are not achieved.

Information, such as the indicators identified above, shows these principles are not being achieved.

4. The Role of Railways

Passenger and freight rail provides a numerous benefits to the Australian community, business and the environment including:

- supporting regional communities;
- reducing community health effects;
- minimising environmental consequences;
- reducing the road toll by reducing crashes;
- limiting local government road maintenance;
- limiting road investment demands on Treasuries;
- improving international competitiveness for agriculture;
- reducing road infrastructure costs for state government road authorities; and
- maintaining robust transport systems to suit a variety of futures, including reduced oil availability.

Greater use of both passenger and freight rail will benefit business, the environment and the Australian community in general. Rail should be the preferred mode of transport for high volume, long distance freight including:

- all intermodal freight between capital cities;
- bulk freight; and
- mass public transport.

Rail transport is around four times as energy efficient as road transport for freight and twice as efficient as for moving people. These efficiencies are much higher for tasks with higher demand. Rail is cheaper for all intercapital freight transport. Therefore, any government interventions should maximise the inherent advantages of rail transport to be successful. If Australia is to achieve its transport performance targets, a significant increase in rail transport must be part of the solution. Government policy and infrastructure investment must ensure that rail transport contributes as a key solution in improving transport outcomes.

5. Government Policy Context

It is difficult to develop policy without adequate context and direction for integrated land transport. Overcoming the policy vacuum requires government direction on:

- a strategic plan describing the intended future for integrated and multimodal transport intentions and solutions;
- a comprehensive policy agenda describing the directions to meet future requirements; and
- adequate data and information from which to base strategic and specific activities.

Without this clear context there is a significant risk that individual actions, while appearing beneficial at the micro level, are counterproductive to the desired objectives of the land transport system as a whole. Furthermore, there is a risk that key elements which might provide integrated benefits for the various modes may be overlooked.

The choice of solutions to Australia's transport challenges should occur through a robust transport management decision process, in order to produce a balanced transport strategy which optimises solutions. Unfortunately, this generally does not occur in Australia where transport planning and decision making is characterised by

narrow analysis and short term horizons. Therefore, NTC should be investigating new governance arrangements and processes to improve Australian transport.

6. Transport Context and Information

There is insufficient strategic context available about future demands and supply, and analysis of the gap which results, such as:

- future city operation
 - congestion, health, crashes, emissions, travel time, fuel pricing, etc;
- transport demands (which is the driver of system need and provision)
 - population, agriculture, consumer, regional, mining, tourism, etc;
 - safety, reliability, comfort, speed, etc;
 - the size of the future transport task;
 - the proportion of the transport task available or possible for rail to transport; the amount of freight which is contestable by road and rail.
 - the term 'contestability' should also be critically assessed, because it depends on so many factors;
- infrastructure and rolling stock
 - life, applicability, deterioration, etc; and
- system capacity and performance
 - travel time, congestion, safety, health, reliability, cost, etc.

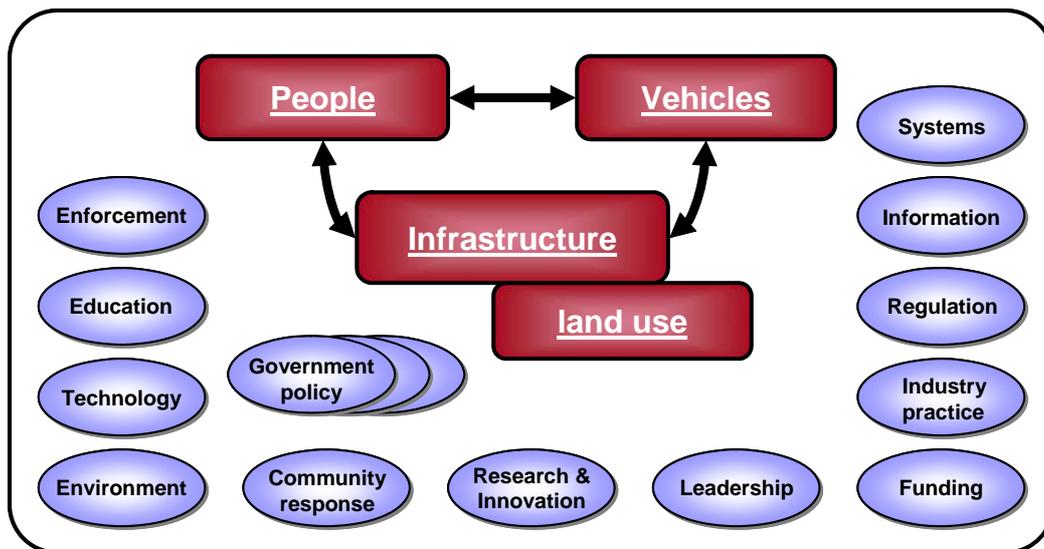
Without this contextual and strategic information the most effective and efficient productivity improvements may not be identified and chosen.

The data and information provided as background to the Paper is too limited to describe the context, industry and issues. Indeed, there is a perception in the rail industry that the Paper conveys the wrong impression about railways and would therefore lead to incorrect and inadequate solutions.

Due to the generalised nature of the context described, specific issues are not evident. For instance, rail carries 53% of the land freight task, a demand which is growing significantly. However, such a statistic hides the shift from rail to road freight for contestable markets such as grain, the difficulty in maintaining market share for intermodal freight transport or the market differences between different corridors.

7. Whole Transport System Perspective

We can consider the railways from a system view, recognising its wider context as a part of transport and wider still to the economy, community and environment, as shown in the following diagram.



The three fundamental elements comprise:

- infrastructure (including land use)
 - track, signalling, stations, terminals ticketing & information systems, stabling, and
 - surrounding urban form, intermodal terminals, passenger interchanges, ports, road and other access, etc;
- rolling stock
 - locomotives, wagons, passenger cars; and
- people
 - users (passengers & freight forwarders) and a wide variety of staff.

These operate in a wider context including;

- community expectations and needs;
- business/commerce and the economy
 - demand and competition, agriculture, mining, services, tourism, etc, sectors;
- the finance sector
 - both private and government including funding and taxation;
- regulation
 - safety, environment, occupational health and safety, access/pricing, business, etc;
- technology
 - mechanical, construction, information communication & control, etc;
- industry practice
 - culture, systems, processes, standards, etc;
- research, innovation, data and information, needs assessment and gap analysis;
- processes for decision making, user choice, planning, by government, private sector and others; and
- leadership
 - risk management, enthusiasm, strategic planning, ensuring capacity and competency, integration, etc.

The benefits (and costs) of overcoming impediments and realising opportunities for each one of these should be considered and analysed for improvements which could potentially benefit rail productivity.

8. Complementary Government Policies

Due to the diversity and complexity of the transport system there are numerous potential interventions available to governments, such as:

- urban form/land use
 - stations, public transport interchanges, intermodal terminals, access roads etc;
- land use and transport planning improvements and innovations;
- transport system research & data;
- railway research and innovation;
- Government policy, systems, processes and planning for transport land use, the environment, finance, regions, business and other areas;
- procurement strategies;
- staffing and skills;
- demand analysis leading to needs assessment;
- rolling stock age, configuration & suitability;
- required investment levels;
- the role of ownership and control in the logistics chain or value chain analysis;
- proper road pricing
 - especially earlier introduction of mass-distance location charging; and
- financial arrangements (eg accelerated depreciation for rolling stock and infrastructure).

9. Market Based Transport Systems

Market principles and systems often provide a valid basis for the provision and operation of transport in Australia. However, these systems should not be relied on unquestionably as they are evidently imperfect, due to:

- inability to price all benefits and costs accurately;
- inability to include all externalities appropriately;
- difficulty in including social and welfare benefits;
- business influences such as ownership control and contractual arrangements;
- difficulty in balancing 'winners and losers';
- political influence; and
- other specific occurrences of traditionally recognised market failures.

There is no subsidisation given to rail operators to use the rail network. In contrast, road networks are shared with individual private users and their cost input to the use of the road network cross subsidises road investment. Concerns regarding road congestion and commuter transit times encourages or forces road investment, which then benefits road freight transport. From a greenhouse gas emissions perspective, this road freight subsidy has negatively distorted the outcome to favour road transport over more carbon efficient rail transport.

The costs for accessing rail and road infrastructure and the externalities that result from congestion costs, accidents, and environmental impact are certainly not recovered by road user charges when compared to rail. NTC should examine the true costs in providing transport network infrastructure to ensure that the full costs and cross subsidisation is understood so policies can be clearly considered to ensure that

inefficient investment and pricing disparities between competing transport modes are removed.