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The Secretary  
House of Representatives Economics, Finance and Public Administration Committee  
Parliament House  
CANBERRA ACT 2601 by e-mail EFPA.Reps@aph.gov.au

Dear Secretary,

**Re Inquiry into Local Government and Cost Shifting**

Would you please accept this letter as a brief submission to the inquiry.

Comment is offered on aspects of cost shifting from the State Government to Local Government in relation to land transport.

The Railway Technical Society of Australasia (RTSA) is a technical society of the Institution of Engineers, Australia with over 800 members. The RTSA has active programs based in mainland State Capital cities and maintains an ongoing program of Continuing Professional Development activities including technical presentations and study tours. It is also hosting a major biennial Conference on Railway Engineering at Wollongong, 10-13 November 2002.

Along with making submissions to all levels of Government, the Society has recently published brochures including "Getting Rail Back On Track". These are available on request.

1. Australia has approximately 800,000 kilometres of roads. From Table 2.3 of a 2000 Austroads publication called Road Facts 2000 the following information was given for 1995.

18,400 km were part of the National Highway System

96,840 km were rural arterial roads

12,232 km were urban arterial roads

587,000 km were rural local roads

75,200 km were urban local roads

The following information was given by Austroads (loc.cit.) for 1999

18,619 km were part of the National Highway System

94,793 km were rural arterial roads

12,441 km were urban arterial roads

600,914 km were rural local roads

84,834 km were urban local roads

Most of the Australian road system is the responsibility of Local Government.

2. Most Federal land transport funds are applied to roads. The outlay of the Federal Government from 1974 to 1999 on the National Highway System has been nearly \$18 billion in 1999 terms. As shown in Appendix C of the book *Back on Track: Rethinking transport policy in Australia and New Zealand* (by Laird, Newman, Bachels and Kenworthy and published in August 2001 by UNSW Press) the total outlay of the Federal Government on all roads from 1974 to 1999 has been nearly \$43 billion, in 1999 terms. This comprises \$37.5 billion of 'tied' grants and \$5.3 billion of 'untied' grants to the States and Local Government between 1991 and 1999. By way of contrast, in the 25 years to 1999, in 1999 terms, less than \$2 billion was applied to rail capital works, and only about \$1.5 billion to urban public transport.

In addition to Federal Government outlays on roads, States and Local Government also fund roads. By way of example, in 1997-98, the respective road expenditures for each level of Government were \$1.6 billion, \$3.4 billion and \$2.0 billion (Bureau of Transport Economics, 1999, *Public Road – related expenditure and revenue in Australia*). This now results in at least \$7 billion being outlaid each year on Australian roads.

The Committee may care to inquire of the Department of Transport and Regional Services (DOTARS) if there are more recent estimates of road expenditure by different levels of Government.

3. In a 2001 submission to the Fuel Taxation Inquiry, the Australian Local Government Association (ALGA) noted that a comprehensive study in South Australia “*found on average the annual rate of deterioration of the local road network in SA is three times more than the level of expenditure on replacement/rehabilitation.*”

This suggest that funds available for maintenance of SA regional roads have been found to be about one third of what is required to maintain the asset. The ALGA submission noted that a similar situation holds in Victoria, and goes on to note “*Local road users (who are often not local ratepayers) are not paying for the consumption of the assets they are using.*”

4. Over the last twenty-five years, road pavements have had to withstand appreciably increased loads.

In brief, a six axle articulated truck during the mid 1970s had a legal Gross Vehicle Mass (GVM) of 36 tonnes. Despite the use of road trains, and the increasing use of B-

Doubles that were introduced in Australia during the 1980s, the six axle articulated truck remains the 'workhorse' of the Australian road freight industry.

As a result of the April 1979 truck blockades, most State Governments lifted the GVM of six axle articulated trucks to 38 tonnes.

Further relaxation of legal GVM limits occurred during the 1980s and 1990s, at different times in different states. Following a NAASRA (now Austroads) Review of Road Vehicle Limits series of reports, the legal GVM of a six axle articulated truck was raised from 38 tonnes to 41 tonnes and later to 42.5 tonnes in the 1980s.

5. By 1990, most States allowed a GVM of 42.5 tonnes for a 6AAT. However NSW, Victoria and the then current Federal Interstate Registration Scheme (FIRS) required additional payments of a permit fee in order for a truck to legally operate at the higher GVM. However, this form of load restraint was set aside when the States, one by one, in the early to mid 1990s, adopted uniform National Road Transport Commission (NRTC) charges which gave all 6AATs road access at 42.5 tonnes. Moreover, heavier loads were encouraged by the NRTC charge for a six axle articulated truck being a fixed one (of \$4000 during the 1990s, only recently indexed for inflation), irrespective of GVM up to 42.5 tonnes.

6. The cost of maintaining an arterial road constructed and paved to reasonable standards depends mainly on road pavement wear and tear. This factor is quantified by using the concept of an Equivalent Standard Axle Loading or ESAL. Here road pavement usage is related to the fourth power of the axle loading. A six axle articulated truck with 38 tonnes Gross Vehicle Mass (GVM) has an ESAL of 3.38, and an average sized family car has an ESAL of about 0.0003 (Inter-State Commission, 1986, p476). These figures give rise to an oft quoted rule that the pavement damage done by the passage of a loaded semitrailer is about 10,000 times the damage of an average car.

As noted above, there has been relaxation of gross vehicle mass (GVM) limits for six axle articulated trucks from 38 tonnes to 42.5 tonnes. Whilst this increase in GVM appears slight, the number of ESALs increases sharply from 3.38 to 5.06 ESALs or by 50%. This is about 15,000 times the pavement wear and tear of an average car. A fully laden B – Double has 20,000 or more ESALs.

As trucks moved to higher mass limits under charges in State Government legislation and/or regulation, additional wear and tear was being imposed on all roads maintained by Local Government. In some cases, it could be argued that the mass limit increases resulted in less illegal overloading.

However, in the absence of increased payments from State to Local Government for funds to accommodate heavier loads on local roads, there was cost shifting to Local Government.

7. The State of NSW was required under a COAG agreement re National Competition Policy Trench payments to adopt NRTC charges for heavy trucks. This was done in 1996. The cost to the NSW Government, along with reduced load management restraint, has been high. In discussing the Road Transport Legislation (Heavy Vehicle Registration Charges and Motor Vehicle Tax) Amendment Bill (NSW Legislative Council Hansard for 6 December 2001) - it was noted that " *'productivity savings to industry' of \$59 million in 1996-97. Further savings from flow-on effects are estimated to be \$62 million in 1997-98 and up to \$71 million in 1998-99. "*

To our knowledge, the cost to Local Government in NSW (or Australia), of heavier mass for heavy trucks has never been evaluated.

8. From the above discussion, cost shifting to Local Government occurred when NSW was required, under a COAG agreement, to lift mass limits for heavy trucks.

9. A further example of road cost shifting to Local Government, as a result of a Federal Government action, was noted by the Industry Commission in its 1991 report into rail. To quote from the *Industry Commission, Rail Transport, Report No 13, 21 August 1991 p 115*

**“5.4.3 Local government road expenditure and road externalities**

Branch line closures (or service reductions) can result in more heavy vehicles on local roads; the consequent pavement damage can add significantly to local government road expenditure. Heavy vehicles travelling through country towns can also impose large noise and pollution costs on the local residents. The ALGA, taking a national perspective, commented as follows:

*In looking at the economies of closing the branch line, the cost of upgrading the road alternative to a standard where it can do the same job efficiently need to be taken into account. From the perspective of developing a rational transport system, the economies of saving public expenditure by closing a branch line might be illusionary if the net result is a requirement to increase public expenditure on roads. (Submission 81)*

"The issue is well illustrated by AN's closure of the Gladstone to Wilmington line in South Australia. AN operates as a commercial business and is unable to take into account increased damage to local roads when deciding upon rationalisation of its network. When AN lost the contract to transport grain there was a large increase in the number of trucks travelling on local roads such that the District Council of Mount Remarkable estimated a doubling of the maintenance cost of a 21 km length of local road. The estimated additional costs were \$140,000 (in 1990 prices) every four to five years (ALGA, Submission 81). If the cost of such road damage had been included in

the cost of road transport, sufficient traffic may have been retained on the rail line to warrant keeping it open...."

" Costs borne initially by AN were effectively transferred to a local government body, and then transferred to the State government."

10. A series of Government reports in the 1970s and 1980s, also a 1999 report of the Bureau of Transport Economics 1999 *'Competitive Neutrality between Road and Rail'*, acknowledged under-recovery of road system costs from the heavy truck operations. This issue is further explored in 'Back on Track'. Analysis in this book found aggregate under-recovery of road system costs from articulated truck operations at about \$1.2 billion in 1997-98 (page 82, and Appendix D). This averages at 1.25 cents per net tonne-kilometre.

However, for roads of light construction, as previously recommended by the NSW Roads and Traffic Authority in 1990 (see Industry Commission 1991 report on rail, p116) an amount of 3 cents per net tonne km would be appropriate for projects when significant damage is done to local roads.

Support for the view that Local Government should be able to recover road pavement costs and other externalities is also given by the Industry Commission, which in their final 1991 report on Rail Transport recommended, inter alia:

*"... that State and Territory laws be amended to provide local governments with effective capacity to impose specific pavement damage and externality charges on heavy vehicles. Such charges should be levied the principals for whom the road haulage is provided. A process of appeal should be set up to settle disputes between the local authority and the principles responsible for the pavement damage or externalities."* (Vol I, p117).

After 11 years, progress is yet to be made with this recommendation.

Moreover, the Industry Commission in its 1991-92 Annual Report (p197-198) noted, inter alia: *"Annual fixed charges are not efficient because costs vary with the distance travelled and the mass of the vehicle. The result is that some vehicles - the heaviest travelling long annual distances - will meet less than 20 per cent of their attributed costs. Charges for heavy vehicles that reflect costs they impose are essential to ensure best use is made of the nation's road and rail infrastructure, and that industry location decisions are appropriate in terms of minimising the overall cost of economic activity. Differences between the recommended charges and road-related costs are greatest for vehicles competing with rail. The charges, as recommended, will therefore potentially distort the long-haul freight market as rail reforms take effect."*

The need for the NRTC charges to be restructured is clear, and a 'second generation' of charges was introduced on 1 July 2000. The new charges resulted in modest increases for articulated trucks registration fees and came into effect on and after road diesel excise fell from about 43 cents a litre to just 20 cents a litre as part of the New Tax

System. However, the 'second generation' charges retain many of the deficiencies of the first generation charges.

11. These points made in the early 1990s by the Industry Commission are still valid. It would clearly be in the national interest for Australia to move to some form of mass-distance charging for the heavier trucks hauling large annual distances.

12. A further form of road cost shifting to Local Government occurs when a State Government decides to close or abandon railway lines. The Australian rail network reached its peak length in the mid 20th Century. The Australian Bureau of Statistics 2000 Year Book notes that on 30 June 1998 there were 31,043 route kilometres of Government track which is down from preceding years.

A publication 'Route - kilometre statistics tracing the evolution of Australian public railways to 30 June 1997' by H G Quinlan, 2001, ARHS (ACT) notes, inter alia, that (Table 41, p 76) the Route - kilometres irrespective of gauge open at the end of each year peaked in 1940 at 44,883 km. The Route - kilometres, irrespective of gauge, from this Table, open at the end of each subsequent decade is as follows.

1950	44,324
1960	42,013
1970	40,795
1980	39,267
1990	34,480

Although new rail lines such as Alice Springs to Darwin are now being built, it is of note that the House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform in its 1998 report *Tracking Australia* warned that a continuation of then current policies (many of which still persist) could lead to a further loss of traffic that could be 'irretrievable' and hence other line closures. One interstate line in a particularly vulnerable situation is the Maitland - Brisbane railway line. The Prime Minister's Rail Projects Taskforce 1999 report also noted "...substandard national track" and the Productivity Commission's 1999 report on progress on rail reform noted past underinvestment in mainline rail track.

Stronger interstate mainlines would also assist in keeping more 'loads off roads'. In May 2001, the Australian Rail Track Corporation (ARTC) released a detailed National Track Audit. In brief, the Track Audit examined minimum freight market improvements (the S1 scenario), significant track improvements (the S2 "stretch" target scenario), and after economic analysis, recommended optimised investment of \$507 million with a combined benefit cost ratio of 3.2.

Of the proposed optimal investment, \$398 million was recommended for works on the North - South Corridor. The main works were \$146 million for Stage 1 of a Sydney Freight Priority Project, \$73 million for Main South rail track deviations, \$63 million for

crossing loops, \$30 million for a Southern Control optimisation project, and \$16 million to replace the 1880 bridge over the Murrumbidgee River near Wagga Wagga.

The ARTC Track Audit [summary, p 11] identifies present terminal to terminal times of 13 hr 30 min for Melbourne - Sydney, 21 hrs for Sydney - Brisbane, with 36 hrs for Melbourne - Brisbane. These transit times are too long to be competitive for much intercity freight. On completion of the optimal capital works, the transit times would be expected to be reduced, respectively, to 10 hrs 30 min, 17 hrs 30 min and 29 hrs 30 min.

The track audit found that '*significant track upgrades on the Melbourne - Adelaide corridor have reduced transit times considerably*' and such upgrades, with improved reliability, have allowed rail to attract freight traffic. The relatively good track condition and length of the Adelaide - Perth corridor has allowed rail to reach over 77 per cent of land freight on this corridor. However, rail's modal share of land freight on the Melbourne - Sydney and Sydney - Brisbane corridors is a very low 10 to 20 per cent.

Completion of the basic track works will allow rail to reduce its transit times as noted above, which will allow rail to increase its modal share of intercity land freight. The ARTC track audit estimated that there would be a reduction of some 128,000 truck trips per annum (Exec Summary page 13) with appreciable environmental and social benefits.

13. Keeping branch lines open, or conversion of gauge to increase their usefulness, is relevant. When converting broad to standard gauge from Adelaide to Melbourne in 1995, there was a question as to the Victorian broad gauge grain lines that serve Portland. After detailed analysis, it was decided to convert these tracks to standard gauge at a cost of some \$25 million. This cost was appreciably less than line closure and diversion of bulk freight to road at a cost of \$30 million up front and maintenance costs of \$2.5 million a year.

14. Road maintenance costs are exacerbated by overloading by some truck operators. Roads of light construction are most easily damaged by overloading.

The Annual Report of the NSW Department of Main Roads for 1984-85 estimated truck overloading to cost some \$24 million which was then some 13 % of the NSW road maintenance budget. Current estimates would be helpful.

It is understood that Local Government in NSW does have, in some situations, the ability to enforce weight of vehicle regulations. However, when States for reasons of cost cutting, reduce resources to enforcing weight of vehicle regulations, inevitably illegal overloading increases, with more road wear and tear. This in turn increases costs to Local Government.

15. Acting Prime Minister John Anderson, when announcing a new AusLink integrated transport plan on 21 May 2002, said that **"We cannot go on this way. We have to make changes now."**

The Federal Government is to release a Green Paper on the proposed AusLink concept in September. Although AusLink is a good concept, it will need a change in taxation and transport policies along with adequate funding to make it work effectively. Past Federal land transport investment and present tax measures encourage car and truck use whilst discouraging the use of rail.

16. The Committee's attention is drawn to a report recently released by the Queensland Local Government Association called Mechanisms for Funding Queensland's Roads and Transport Infrastructure, by Professor Layton. The report has eight recommendations, including redirection of the Queensland Fuel Subsidy in a way that the extra funds be exclusively applied to road and transport needs. The inquiry also encourages consideration of Public Private Partnerships, Toll Roads and use of loans for long term projects that will benefit future generations.

17. In summary, the overall cost to Local Government as a result of Federal and State policies and actions in both rail line closure, and relaxation of mass and dimension limits for heavy trucks, is unknown. However, it surely runs into billions of dollars, either in increased maintenance and road construction costs, or decreasing the value of the road asset base.

The Committee is invited to consider the formulation of recommendations that will improve local road cost recovery from heavy trucks, and will allow rail to play an increased, rather than decreased role, in serving regional Australia.

18. If it would assist the Committee, representatives of the Society would be pleased to meet with the Committee, and/or supply further information.

Yours sincerely,

(signed) P G Laird