Assoc Prof Philip Laird PhD, Comp IE Aust, MCIT School of Mathematics and Applied Statistics University of Wollongong 2522 Phone (02) 4221 3421 Facsimile (02) 4221 4845

31 st July 2002

Automotive Assistance Inquiry Productivity Commission PO Box 80 BELCONNEN ACT 2616

auto@pc.goc.au

Dear 'Inquiry',

Please accept this letter as a brief submission to the inquiry. Although it has drawn from research conducted at the University of Wollongong, with the support of other agencies, the views expressed are personal professional ones.

INTRODUCTION

In the first place, why have any subsidies at all to the automotive industry ? This industry has enjoyed high levels of sales in recent years and is indirectly is responsible for significant external costs. As noted by the Commission in the relevant position paper (page 17), ... "the Australian vehicle market has been growing steadily in recent years - total vehicle sales in 2002 are expected to exceed 800,000 units, more than 50 per cent above the levels attained a decade ago."

The growth factor is also shown by the strong increase in vehicle kilometres in recent decades. In 1971, some 4 million cars and 1.1 million other vehicles were on the roads, with cars driving that year about 64 billion kilometres (BTCE, 1996, Transport and Greenhouse: Costs and benefits for reducing emissions). In 2000, there were some 9.7 million passenger vehicles that drove an estimated 138.7 billion vehicle kilometres. This is an average of about 7300 km per person. (ABS: SMVU for 2000). This estimate of passenger vehicle kilometres is probably low. In any event, vehicle numbers and vehicle kilometres have grown faster than population.

Hence the increasing interest within Australia in sustainable transport. Most State Governments are involved in integrated transport planning with improvements to urban public transport, and some State Governments have recently conducted trials in Travel Smart, or Travel Choice. Even the Federal Government, when announcing in May 2001 its new integrated transport plan called 'AusLink', has conceded the need for change. As seen by Acting Prime Minister John Anderson on 21 May 2002 when announcing the new 'AusLink' plan said that **"We cannot go on this way. We have to make changes now."**

Given that road vehicle usage in Australia is excessive, is increasing, and imposes significant community costs it is difficult to understand why any Government would wish to drive further growth with substantial 'non-tariff' assistance.

Australia has now seen several years where about 750,000 new vehicles have been sold each year. It is acknowledged that many of these vehicles are more fuel efficient, and hence less polluting, than older vehicles. As well, many of the new vehicles are safer than the older vehicles. However, if there is to be an improvement in the entire fleet, it is necessary that older vehicles be removed. This then raises the questions of:

A. What is the rate of removal of older vehicles;

B. Are Government incentives strong enough to ensure that sufficient older vehicles (deficient in either safety or environmental measures) are being removed.

ROAD DEFICITS

Analysis for a recent book 'Back on Track- rethinking transport policy in Australia and New Zealand' (by Laird, Newman, Bachels and Kenworthy, UNSW Press 2001) showed that along with \$7 billion for 1997-98 for road works, there was a further \$7 billion for the net cost of road crashes. This amount is \$15 billion estimated by the Bureau of Transport Economics (The cost of road crashes, 2000) less \$8 billion paid in insurance premiums. There is a further \$3 billion in Federal tax loss due to over \$12 billion of tax deductions, plus about \$3 billion for noise and air pollution. This means there was that year \$20 billion of road based costs for 1997-98. Fuel excise and registration charges were about \$12 billion that financial year. **This leads to an \$8 billion annual 'road deficit'**. This road deficit includes a \$2 billion 'road freight deficit' for the operation of articulated trucks.

These estimates are debatable. For example, the Bus Industry Confederation argued to the recent Fuel Taxation Inquiry that air pollution and noise costs are \$5 billion per year – up from \$3 billion that forms part of the above road deficit. There are also road congestion costs that for the Sydney region alone are now over \$6 billion a year.

Added to this, the Commission in its recent position paper on Review of Automotive Assistance has noted - page 97 - that non tariff assistance alone to the car industry is worth around \$700 million a year. Australia could build a lot of extra roads, rail track and/or trains for \$700 million a year.

As argued elsewhere (e.g. Back on Track) there is demonstrably excessive road vehicle usage in Australia. This is due to many factors including Federal Government tax incentives to use cars and taxation measures that discourage public transport use, plus a need to improve urban public transport and intercity rail.

BETTER TARGETING OF ASSISTANCE

If 'non-tariff' assistance is to be continued to the Automotive Industry, clearly defined performance indicators should be set out. These could include improvements in vehicle safety (not only to the occupants of the vehicle being made but also other road users including pedestrians and cyclists), and improving the average fuel efficiency of the passenger vehicle fleet.

It is submitted that measures that give special assistance to the purchase of larger four wheel drive vehicles should be reversed. The larger such vehicles impose increased road safety risks on other road users, and use more fuel per 100 litres. In short, if Governments in Australia must subsidise vehicle production, they should only subsidise SAFE AND FUEL EFFICIENT vehicles.

As noted by the Commission in Section 7.3 (page 72) of the position paper, there is a relationship between safety and environmental policies and industry policy. The proposal to bring together the tariff on passenger and four wheel drives is supported, but if the tariff on passenger vehicles is not going to be reduced by Government (and there are some valid reasons for retaining a tariff), then the Commission may care to give explicit support to raising the tariff on four wheel drives. It is of note that the four wheel drive section of the vehicle market is a fast growing one.

FOUR WHEEL DRIVE VEHICLES

The DOTRS submission to the Commission's current inquiry notes in regards to Four Wheel Drive vehicles (4WDs) inter alia that " 4WDs have grown from about 2 per cent of new light vehicle sales in 1980 to nearly 15 per cent in 2001 though mostly due to very strong growth at the small end of the 4WD market. ... Tariffs on 4WDs, as well as LCVs, are generally 10 percentage points lower than for passenger cars."

This submission also notes a 2000 Monash University Accident Research Centre report Vehicle crashworthiness and aggressivity ratings and crashworthiness by year of manufacture:... that "...it did not appear that drivers of larger 4WDs were significantly better protected in a crash than drivers of larger cars. Drivers that were clearly most at risk in crashes were generally those in vehicles within the smallest car category."

The Monash study also examined differences between vehicles in the injury risk vehicles pose to drivers of other vehicles. The results indicated that larger 4WDs generally pose a significantly greater risk to drivers of other vehicles than do larger passenger cars. Both Australian and USA data suggest that risk of a car occupant fatality in a collision with a 4WD is several times higher than in a collision with a large passenger car. ...

In 1998, per kilometre travelled, 4WDs were involved in 20 per cent more fatal accidents than passenger cars and 50 per cent more fatal accidents than trucks under 4.5 tonne gross vehicle mass. However, the extent to which this higher fatality rate might be

due to the design of the larger 4WDs is not clear. Almost 70 per cent of 4WD crashes occurred in rural areas where road speeds tend to be higher and road quality lower.

With regard to greenhouse gas emissions, the trend to 4WDs is likely to increase greenhouse gas emissions. The average fuel economy of 4WDs sold in 2001 was almost 30 per cent worse than the average for all light vehicles sold. However, there are considerable differences in the fuel economy of vehicles within the 4WD and car categories.

A shift towards the use of 4WDs in urban areas is likely to have adverse impacts on urban air quality. Under current emission standards, 4WDs above 2.7 tonnes are required to meet considerably less stringent emission limits than passenger cars. Only one of the nine top selling 4WDs is required to meet passenger car emission standards.

Despite the above acknowledgment that 4WDs do not assist road safety, environment or greenhouse gas reduction targets, the submission notes that "DOTARS does not favour increasing the tariff on 4WDs to the passenger car level. This would increase transport costs and would be a blunt tool for addressing urban air quality and road safety objectives, particularly given the significant use of 4WDs off-road."

It is submitted that the Commission should take a more rigorous approach.

CAR HAULING SUBSIDIES

A further form of assistance to vehicle sales in Australia is the road haulage of cars by heavier trucks. This applies to both imported cars being moved from a port to a point of sale, and Australian made cars. Broadly assessed hidden subsidies of about 2 cents per net tonne kilometre for freight moved by articulated trucks were identified in 'Back on Track.' The external costs comprised 1.25 cents per net tonne kilometre (tkm) unrecovered road system costs, 0.5 cents per tkm road crash involvement risk, and 0.25 cents per ntkm air and noise pollution. If an allowance is to be made for greenhouse gas emissions at say \$A40 per tonne for carbon dioxide, a further 0.3 cents/ntkm should be added. Whilst such average estimates should to be reworked for car carrying trucks, with differentiation between haulage in urban and non-urban areas, the bottom line is that some form of hidden subsidy is involved for the road haulage of motor passenger vehicles.

For long distance transport of motor cars, some economy can be gained by line haul rail transport using triple decked car carriers. However, the necessary overhead clearance above the tracks on mainland inter capital city track is only available between Perth and Adelaide or Parkes. Lifting of clearances on other sections of mainland track would also allow for the movement of double stacked containers. The need to upgrade '...substandard national track' was noted by the Commission in its 1999 report on progress in rail reform.

IMPROVING ENERGY EFFICIENCY

As noted above, Australia's average fuel usage has shown little improvement since the 1960s. The graph from page 86 of 'Back on Track' below tells the story. Other countries, including the United States, have done much better in improving average fuel efficiency.

Figure 4.1 The fuel consumption rate (and not fuel efficiency) of the Australian car fleet since the 1960s - in 1993 and in 1995, it was about 11.4 litres per 100 km. Source: Motor Vehicle Usage Surveys. From Back on Track and summarised in Paul Mees's book 'A very public solution; transport in the dispersed city' Melbourne University Press, 2000.

The DOTRS submission to the Commission's current inquiry asks *Is there a case to strengthen the current approach to achieving National Average Fuel Consumption (NAFC) targets?*

This DOTRS submission goes on to note that "On average, vehicles in Australia have worse fuel economy than in many other countries. However, this tends to be due to Australian preferences for larger vehicles rather than a significantly worse fuel economy of Australian-made vehicles relative to their imported competitors.

As part of its 1998 National Greenhouse Strategy, the Commonwealth undertook to negotiate with the automotive industry to secure a 15 per cent improvement in the National Average Fuel Consumption (NAFC) for new passenger motor vehicles by 2010. This represents a reduction from about 8 litres per 100 km to about 6.3 litres per 100 km. It was also agreed that the NAFC framework would be extended to include LCVs and 4WDs to 3.5 tonnes.

As the NAFC targets are essentially voluntary, there is little financial motivation for the automotive industry to achieve fuel efficiency levels beyond that which reflects the demands of consumers.

A number of countries have adopted or considered policies aimed at increasing the fuel efficiency of new vehicles through regulation or by providing financial incentives or penalties. The NSW Government is currently developing more favourable stamp duty rates for lower emission vehicles. Probably the most well known measure is the Corporate Average Fuel Efficiency (CAFE) scheme that was introduced in the USA in 1975. While CAFE was originally aimed at reducing reliance on imported oil, its emphasis has shifted in recent years to environmental objectives relating to vehicle emissions.

The DOTARS submission raises a number of concerns with policies, such as CAFE, that directly regulate or provide financial incentives or penalties that target fuelefficient vehicles as a greenhouse measure.

As noted by the Australian Consumers Association (ACA) in their submission to the Commission, "Excess fuel consumption has an economic cost to Australia as well as to each car consumer and relates directly, of course, to greenhouse gas emissions... The recent introduction of a fuel consumption labelling program for cars by the Australian Greenhouse office is perhaps too little too late. Australia's fleet average fuel consumption has for long been about the world's worst since the United States made a major shift in car making in the 1970s and 1980s (CAFE program)."

The ACA submission notes the poor fuel efficiency factor is support for "large, heavy fuel inefficient local cars" plus a trend to 4WDs etc and the older average age of the Australian fleet (which also adversely impacts on air quality in large cities).

The Commission is invited to make recommendations regarding tariffs and nontariff assistance to attempt to improve average fuel efficiency of the Australian passenger vehicle usage.

In addition, the Commission is invited to keep in mind the fact that car use, particularly by single occupancy vehicles, is not as energy efficient (in terms of passenger kilometres per Megajoule) as an efficient bus or rail public transport option. Thus, it is possible that any move to lower prices for more energy efficient cars (as per AAA, and the Australian Greenhouse Office as cited on page 103 of the position paper) may in turn lead to more cars on the roads (with more people being diverted from public transport), and hence an overall increase in energy use in passenger transportation. Thus, policies to encourage the purchase of relatively energy efficient cars should be supplemented with policies to discourage the purchase of gas guzzlers and the scrapping of older cars that have poor fuel efficiency.

CONCLUSIONS

As above, why have any non-tariff subsidies at all to the automotive industry ? If they must continue, the Commission is encouraged to recommend measures to ensure that the safety and environmental performance of the fleet is improved. The Commission is also encouraged to seek a reference to hold a further inquiry into Urban Transport, and to follow up on its earlier recommendation from its 1999 report on Progress in Rail Reform to conduct an inquiry into road funding, provision and pricing.

Yours sincerely,