

Chairman and Members,  
Productivity Commission Panel  
“Freight Inquiry”

**The economic costs of freight infrastructure and  
efficient approaches to transport pricing**

Dear Panel Members,

This submission relates to the resources used by transportation and how an efficient approach to subsidies and pricing can result in long term reduction of demand for resources.

To arrive at optimum policy settings it is essential to gain full information about the true and total resource usage of each mode and each distinct kind of task. This full information will be an indicator of the cost to society if the needed market reform is not achieved.

The submission concludes that rail services should be enhanced in whatever ways necessary to absorb most of the growth in transport task in coming decades. If this plan succeeds, transport will ultimately use less land, less energy and cause less harm *vis-à-vis* the base case in which, as currently expected, rail maintains its share of the increasing task.

In this way, by the time the nation’s transport tasks reach four times today’s levels, road traffic will have little increase from today. Roads will be greatly improved for safety and efficiency but not capacity, and will be allowed to congest. And rail, carrying a tenfold increase, will offer standard and innovative services – efficient, economical and meeting the community’s needs – for freight and passengers.

I request you to take into account the submissions made and verbal evidence given to the Productivity Commission by Balance Research in the earlier enquiry “Progress in Rail Reform”, much of which I consider to be relevant to the present issues. The submissions and transcripts are included below.

[Submissions numbered 41 and 112; transcripts 12 Nov 1998 and 25 May 1999.]

I would like to make a verbal presentation to the Commission.

Yours sincerely,

{ Michael Isaachsen }

Director

**The “key issue” is that even with today’s improved recognition by governments of the role of rail, the road task is still expected to grow, eventually doubling and redoubling. Four times present road traffic will be an unsustainable burden for society. If rail were to be enabled to absorb the growth, leaving road traffic around its present level, the future transportation network would be using less land and less energy and causing less harm than it will if present settings continue.**

# Balance Research Submission to Productivity Commission Inquiry: PRICING OF ROAD AND RAIL INFRASTRUCTURE

## Table of Contents

1.	WHY DO WE HAVE RAILWAYS? . . . . .	3
2.	MARKET FAILURE . . . . .	3
3.	COPING WITH TWO, THEN FOUR, TIMES TODAY’S TASK	4
	3.3 RAIL COULD ABSORB THE GROWTH	
4.	ROAD AND RAIL NETWORKS . . . . .	4
	4.4 HIGHWAY NETWORK IMPROVEMENTS	
	4.5 METRO FREIGHT ON RAIL	
	BOX 4.6 – CROSS TOWN AND ORBITAL RAIL : THE CASE	
	4.7 COUNTRY FREIGHT SERVICES	
	4.8 INTERCAPITAL FREIGHT SERVICES	
5.	ROAD AND RAIL RESOURCES . . . . .	6
	5.1 LAND REQUIREMENT	
	5.2 TRAUMA AND HEALTH	
	5.3 SAFETY COSTS	
6.	THE NEW LOGISTICS . . . . .	7
7.	FULLY COMMERCIAL ? .. . . .	7
	7.5 COMPETITIVE NEUTRALITY	
8.	FINANCIAL ARRANGEMENTS . . . . .	8
	8.4 CHARGING FOR ALL RESOURCES USED	
	8.5 COMPROMISE	
	8.6 CATCH-UP INVESTMENT	
	8.7 STUDY THE EXISTING RELATIONSHIPS	
	8.8 MARGINAL PRICING, AVERAGE PRICING, AND OUTCOME PRICING	
9.	COMMUNITY ATTITUDES “AMBIVALENT” . . . . .	11
10.	CONCLUSION . . . . .	11

### APPENDICES

Balance Research Submissions and Verbal Evidence to  
Productivity Commission Inquiry “Progress in Rail Reform”

Original Submission, October 1998	12
Hearing Transcript, November 1998	17
Submission in Reply, May 1999	33
Hearing Transcript, May 1999	38

## 1. WHY DO WE HAVE RAILWAYS?

1.1 In the present times, when highways and driving are so popular, there are some who feel that railways are outdated and should not be supported except for limited roles such as city-oriented public transport and bulk haulage.

1.2 On the other hand, many realise that road travel and freight is so popular that, however much new capacity is built, it will in turn be filled and congested. They see that additional traffic will add to road trauma and other effects, including the use of more and more land.

1.3 One reason so much traffic uses the road is that so many places are unreachable by full-time, satisfactory public transport and by rail freight. Another is that there is no specific charge for use of most roads and highways.

1.4 The role of rail (from a public policy point of view) is surely not to benefit the rail industry, nor is it to provide transport for those who cannot drive, although that's an extra benefit. Its role is to be a viable alternative to road. If public transport and rail freight are well provided and correctly priced they will control or stop the incessant growth of the mode which uses more land, more energy and causes more damage.

## 2. MARKET FAILURE

2.1 Each mode uses numerous resources and many of them are not readily expressed in money values. There are those costs often mentioned, like provision, upkeep (not overlooking "deferred upkeep") and renewal of infrastructure, corridor land, direct labour, local pollution, energy [including global pollution], and congestion. There are the costs of accidents, including the costs to third parties like families and employers and the (unmet) costs of the health system responses. And transport activities also deplete the indistinct resources such as "quiet neighbourhood" and "feeling of safety where you live, play and travel".

2.2 The fact that many citizens would prefer freight not to be on the road system, and prefer not to have more highway traffic (so long as **they** can use it when they want to), is an indicator of the cost to the community of road-based transport. They are probably pleased that road freight, as the main mode today for moving goods to their supermarket, costs less than if it were fully priced. But they may not be able to assess that saving against the damaging effects of road transport, especially considering that in future it will double and redouble if not checked.

2.3 Today's pricing systems for transport fail to reflect the difference in true and total resources used by the competing modes, and specifically the additional resources that will be used by increments of task. This results in a continuing distortion of user behaviour (modal choice) and causes significant detriment to society. This phenomenon is observed in almost every country.

2.4 While all modes cause noise, pollution and trauma, it is observed that the road mode engages more land, more energy, more road damage and far more damage to the community per unit of task, than rail. Yet the pricing signals give the opposite message to travellers and shippers of goods.

2.5 If, as some analysts conclude, the present levels of charging for highway usage and rail infrastructure are somewhere near optimal, then society is on an unstoppable path to four times today's road traffic (and then some). Such an analysis has failed to value the damage done by transportation, in its various modes and tasks, as society in general would value it.

### **3. COPING WITH TWO, THEN FOUR, TIMES TODAY'S TASK**

3.1 The result of this relationship is that if the nation incurs the next doubling of task while not correcting the pricing signals, transport will by that time be engaging far more resources than necessary – a very sub-optimal outcome. Both road and rail would probably keep their existing shares of the growing tasks. They may both double in perhaps twenty years and reach four times in following decades.

3.2 Although not many citizens have contemplated the specific issue of road traffic reaching four times today's levels, there is a well reported community sentiment that more road traffic is not welcome. Balance Research has conducted a limited face-to-face study with strangers, asking for the respondent's reaction to road traffic doubling over decades and then doubling again. Without exception, respondents have said that this would be unacceptable.

#### **3.3 RAIL COULD ABSORB THE GROWTH**

3.3.1 It is the submission of Balance Research that **the means could be devised** for the rail mode to absorb most of the future task increase. This would leave the road task around its present level, benefitting the nation substantially when compared with the "**base case**" of rail growing at the same rate as road traffic.

3.3.2 The savings to governments and society from avoiding the unsustainable growth of road traffic would need to be assessed both *ex ante* and on an ongoing basis. The additional capital and operating expenses of public transport and rail freight systems needed to achieve that avoidance are likely to be less than those savings.

3.3.3 It is likely that providers of rail infrastructure and rail services would provide all the funding needed if they could be guaranteed an appropriate share of the savings. Another way of putting this is that contracts with rail entities would reward them for avoiding growth in road traffic.

### **4. ROAD AND RAIL NETWORKS**

4.1 Despite the rhetoric of commentators and government representatives about "taking trucks off the road" by improving rail services, there is no risk of this happening. Improving rail services in price/service and in reach, will not diminish the total tasks performed by trucking. But it will alter the mix of tasks, with greater emphasis on linking into the rail system. Line-haul trucking would remain a vital service and become safer as road funds concentrate on quality and standards rather than volume.

4.2 In order for rail to absorb the growth in total freight task, the rail freight network will have to be re-established into the industrial zones of major cities and to all population centres. The emphasis will need to be on direct ("dock-to-dock") rail transit, with intermodal service a second-best.

4.3 To limit the growth of passenger task on road, the public transport system (including buses) will need to be good enough to make families confident that they can live without a car. It must provide fast and reliable transit in all heavily trafficked corridors, including those with no rail service at present.

#### **4.4 HIGHWAY NETWORK IMPROVEMENTS**

4.4.1 It is essential for the nation to retain and improve a high quality system of highways and local roads, and an efficient, responsive, safety-conscious and substantial road transport industry.

4.4.2 Road funding will be concentrated on improving the quality and safety of road systems, rather than on increasing capacity. The need to continue to work towards safer trucking will impose a cost on providers, which shippers will eventually have to pay for when no provider is willing to avoid safety issues.

4.4.3 Shippers of goods must be able to choose road transport when it best meets their needs. Their choices of transport mode should be informed by pricing signals which reflect, absolutely or relatively, the true and total resource-cost of those choices.

#### **4.5 METRO FREIGHT ON RAIL**

4.5.1 It has taken about 50 years to dismantle the suburban freight networks which previously gave direct service to most major industries and “local siding” service to others. It may well take 50 years to restore that service, starting now. Intermodal service will be used where one or both ends of a task require it, with common-user terminals established within a few kilometres of every major industry.

4.5.2 With intra-metro freight making up a substantial proportion of the total freight task, and also a significant factor in demand for metro highways, a scheme like Metro Freight on Rail offers hope of containing the growth of highway traffic. Possibly 75% of metro-to-metro demand could be handled by rail within the 50-year timeframe, by which time the total task may be four times today’s level. If achieved, this will represent a substantial reduction in resources used for transport compared to the “base case”, even allowing for the need to construct new facilities.

4.5.3 New cross-town or orbital lines will probably be justified for passenger services in decades to come, and freight will use these lines to reach out to all industrial areas.

#### **BOX 4.6**

##### **CROSS TOWN AND ORBITAL RAIL : THE CASE**

As an exercise, you may like to visualise a non-radial corridor in which present-day traffic (passenger and freight) substantially occupies an existing high quality highway for several hours each working day. Assuming that there are three lanes in each direction, there could be 4000 persons moving, per peak hour per direction. And perhaps 400 trucks.

At some future time, the transport task in this corridor may reach four times today’s level. Part of this will be realised in the form of longer peaks, earlier start and later finish; part will overflow onto lesser roads. But the demand will be there for relief in the form of new lanes or a railway.

If there is no railway by that time, and allowing for doubling of the hours of peak flow, there will be a need for doubling of road lanes, either on the same reservation or perhaps an additional road of six lanes.

Governments generally cannot resist the political pressure to do something about congestion. It will probably be done a pair of lanes at a time, a decade or so apart. More land may well be needed. The inconvenience is put down to the price of progress.

Alternatively, a standard, two-track railway could relieve congestion in that corridor for many decades. It could be built in the same reservation or nearby. A (smaller amount) of additional land may be needed. The inconvenience is put down to the need to avoid greater inconvenience elsewhere.

The railway would become part of the (by then) fully integrated public transport and metro freight systems, connecting widely and conveniently to other lines and buses that meet every train. By that time, the 4000 persons moving per peak hour per direction (pphp) could be 16,000, of which 5000 may use the road. The capacity of the railway is between 20,000 and 40,000 pphp. The railway carries 11,000, with a train every four minutes in the peak.

The 400 truck movements may have grown to the equivalent of 1600 per hour by this time. The non-urgent component (regular shipments and low value goods) will largely be handled by rail overnight. Same-day requirements will use the “inter-peak” electric freight system to reach their destination or nearest intermodal freight station. Others, more time-critical, will still use the road, probably about 400 per hour.

#### **4.7 COUNTRY FREIGHT SERVICES**

4.7.1 Road carriers will of course continue to serve many country freight clients but there are traffics that would use less resources if rail, especially dock-to-dock, were available and the pricing signals reflected that resource differential.

4.7.2 Looking back a few decades, metro/country freight rail traffic was substantial. Even though there are now more goods moving (in most corridors), little of that is on rail. This may be because of “load shedding” by railway operators who could not obtain sufficient revenue from this traffic even though it now uses more resources on the road.

4.7.3 To take advantage of correctly aligned pricing signals, rail general-freight service will need to be restored to country locations. There are many towns that have a railway but no longer have operational facilities for general or intermodal freight. This applies to towns on the intercapital routes, on lines mainly serving bulk or passenger services and on lines that have been downgraded and would need major repairs.

4.7.4 It is noted that some lines needing major expenditure may in their own operations be only of marginal benefit in reducing resource usage *vis-à-vis* the highway mode. They may nevertheless be important when considered as origins or destinations within the overall network, reducing resource usage for longer journeys of which the line in question is only a minor part.

#### **4.8 INTERCAPITAL FREIGHT SERVICES**

4.8.1 It would not be surprising to see, within a few decades, the main east-coast intercapital routes consisting of double track and possibly provided with electric traction. Such enhancements may be necessary to cater for the expected growth even in the “base case”.

4.8.2 In the nation’s busiest intercapital corridor, rail now carries some 25% of the corridor’s intercapital freight traffic, relatively little passenger traffic and very little of the non-bulk traffic to and from wayside towns. According to some, complete duplication of this line is already overdue: it is already double track for part of the way. By the time total passenger and non-bulk freight task in this **corridor reaches four times** today’s levels, and with correctly aligned price signals, rail has potential to carry **ten or more times** its present traffic levels, allowing road traffic to consolidate at not much more than today’s levels.

### **5. ROAD AND RAIL RESOURCES**

#### **5.1 LAND REQUIREMENT**

5.1.1 To carry ten times today’s rail traffic on a major single-track route, a second track would need to be completed. If a fast and frequent passenger service is added, a third track would be needed, and possibly a fourth. In most cases, the existing reservation will accommodate the extra track/s. High-speed trains require greater curves and their tracks may require a new reservation and/or tunnelling in parts of the corridor.

5.1.2 On the highway, in the base case when there is four times today’s traffic, between two and four times today’s pavement width may be needed. This may involve a wider reservation, or an additional reservation. In some cases it will involve tunnelling.

#### **5.2 TRAUMA AND HEALTH**

5.2.1 Although rail transport is not without accidents, there is no dispute that per unit task road transport causes more injuries and deaths. Some of the resulting costs are covered by insurance and are thereby “internalised” and visible to the traveller or shipper. But there are other costs borne by families and employers of those injured or killed, and the health system: these are invisible to the traveller or shipper and form part of the hidden subsidy to transportation.

5.2.2 The ever growing road traffic results in more accidents each year despite the gradually reducing rate of accidents. It’s no consolation for those affected to know that the compensation *via* the insurance system was internalised.

5.2.3 Holding road traffic levels steady will result in less accidents as safety improvements are made. The cost to the health system and the community of “general health” effects of transportation will also be held constant or reduced if road traffic increases are avoided.

### **5.3 SAFETY COSTS**

5.3.1 One of the reasons that rail is so much safer is that it is engineered and managed for safety. The vehicles, the track, the traffic control, the maintenance, the health, suitability and control of staff all contribute in ways that are beyond possibility in road transport. This safety is a “public benefit”, but it costs, and skews the market because that benefit is hard for people to evaluate.

5.3.2 In some ways, the high safety cost makes the railway seem inefficient, some say “over-engineered”. But it is this safety engineering that enables rail to reduce the negative impact of transportation.

5.3.3 If road operations were to fully comply with similar engineering and operational standards it would have a substantial effect on road transport charges. It is probable that a majority of road operators would like to see such improved safety requirements industry-wide, but at this stage a significant number of operators would manage to avoid implementing them, forcing unrealistically low pricing to continue.

## **6. THE NEW LOGISTICS**

6.1 In recent decades it has not been hard for logistics managers to choose road haulage for most of their work. Road can be more flexible and faster: direct from supplier or warehousing, exactly on time. Rail service, even where it was still available became dearer as rail operators began shedding their unprofitable services (even though those tasks would use more resources on road). Companies had nothing to lose from locating new factories away from rail.

6.2 As society gradually moves to accepting that highways cannot forever be relieved by adding capacity, and rail service becomes widely available at a favourable service/price differential, managers will see the true cost of the “just in time” (JIT) mode of operation.

6.3 For many, it will still be worth the extra cost to use road, for a variety of reasons.

6.4 But there are many who now use road service “because they can”: they get faster service for no more than rail would charge, or slightly inferior service for far less than rail. In some cases they can get their goods the same day that they order them, so no need to plan ahead. Goods that are of low or moderate value, and goods that are regular shipments, are moved “JIT” because the extra resources of doing so are not visible.

6.5 The new logistics will arise because managers will face poorer and dearer road service and better rail service. Rail (with or without short intermodal legs) will reach into every industrial area. Major industries could receive their entire day’s inputs into their rail dock at 0500 daily, and despatch their outputs after 1900 for delivery across town to their various clients’ rail docks at 0500 next morning.

## **7. FULLY COMMERCIAL ?**

7.1 Governments may continue to choose not to recover the entire cost of transportation: some level of subsidy may therefore continue for road and rail. To that extent, the pricing signals will remain less than the true and total cost of resources used. But if the signals continue to fail to reflect the lower resource usage of rail, the total drain on the community will continue to increase at the present unsustainable rate.

7.2 “Full cost recovery” must be understood to include the costs of all resources engaged by transport: cash and non-cash, government, global and private costs must all be in the mix. It is probable that parts of this mix will never be charged for, mainly “citizen subsidies to transport”, e.g. private, non-insured by-costs of accidents and the private costs of noise, vibration and the fear of danger. But all parts must be assessed and included when comparing levels of subsidy per unit of task.

7.3 Calls are being made by some parties for these “external” costs to continue to be ignored in setting charges for road users, and hence eliminated from the pricing signals. Current understanding of the “external” resource usage per unit task (tonne-Km and passenger-Km) suggests that it is substantially lower by rail than by road. Continuing growth of road traffic can only be minimised if pricing does include (or reflect) all these costs.

7.4 It may be useful for the Commission to ask any parties who advocate continued exclusion of external costs from the reckoning whether they are in fact advocating not only the continuation of a healthy road transport industry but its continued expansion, even doubling and redoubling. And if so, whether they accept that (say) four times the road traffic in a few decades would be harmful to society.

#### **7.5 COMPETITIVE NEUTRALITY**

7.5.1 The previous Inquiry *Progress in Rail Reform* recommended that “competitive neutrality” should be achieved by both road and rail being charged on a “more commercial” basis.

7.5.2 Balance Research pointed out that rail, particularly in its inter-capital operations, was already near-commercial, so if it were to be made “more commercial” it would then be (virtually) fully commercial. Yet road, far from commercial if all costs were accounted for, could be made “more commercial” and still be far off from the goal (of fully paying its way).

### **8. FINANCIAL ARRANGEMENTS**

8.1 The savings to governments and society from avoiding a doubling and redoubling of road traffic will be made available, at least in part, to the rail industry as the price of bringing about that change. This could be simplified in the event that governments decide to abolish every kind of subsidy.

8.2 To empower the railways to absorb the growth and achieve lower resource usage, the fundamental requirement is to equalise the total subsidies to each mode.

8.3 The subsidies, once assessed, could (in principle) be totally abolished. Governments may decide to continue to subsidise transport both directly and by not requiring compensation for non-cash and private losses. To achieve the needed outcome, such subsidies must go equally to each mode. There is an argument in favour of confining the full subsidy to those tasks that are contestable as between road and rail. This could result in major flows of minerals by rail making a greater contribution to average costs.

#### **8.4 CHARGING FOR ALL RESOURCES USED**

8.4.1 In the “no subsidy at all” environment, in addition to the expected charges for road and track provision, maintenance and renewal, compensation would be collected from transport operators. Citizens would be compensated for any loss or damage to their lives or environment from transportation. The global community would be compensated for damage from global pollution. Governments would assess and claim any net outlays needed to enforce safety and other regulations, and to maintain health services as they relate to transport activities.

8.4.2 These compensations and other costs would be assessed for each type of transport task and mode and collected by a combination of fees and methods as now being widely debated. It is likely that such a regime would reward operators with lower fees for safer equipment and practices.

8.4.3 One result would be a significant rise in the cost to travellers and shippers and a consequent softening in demand for some services. Presumably, all road users including private cars would be charged for all mileage, more on higher order roads and expressways. Insurance charges, and perhaps registration fees, could be tailored to their road usage.



8.4.4 Set against an expectation of rising demand for transportation in general, and phased in over a number of years, it seems unlikely that the transport industry as a whole would suffer disruption.

8.4.5 The other expected result is that travellers and shippers would be aware of the true and total cost of resources engaged by their choice of mode. This would most likely mean that public transport and rail freight would take much more of the growing task.

## **8.5 COMPROMISE**

8.5.1 It may safely be assumed, however, that governments will never go this far. Taxpayer funding of roads is a general expectation. Compensating residents for heavy traffic, and raising the charges on road users to cover it, may not be feasible.

8.5.2 What is feasible, and essential, is that whatever level of relief is granted from these imposts on road users, the same level be made available to rail users. The “level of relief” is to be taken as a *monetary amount per unit of similar task*, because of the disparate baskets of resources used by the various modes and tasks. It would not be useful to decide, for example, that neither rail nor road would be charged for the additional costs to the health system due to road and rail activities.

8.5.3 It seems that there would be two, non-mutually exclusive, ways in which such relief could be implemented for the rail industry.

A. The shippers of goods could be granted a rebate on their rail usage, as an incentive not to use the roads. In the case of smaller volume users, the operator could claim the rebate on the shipper’s behalf. Shippers of commodities that would not be suitable for road transport (coal flows, perhaps) may receive less rebate.

B. The railway infrastructure owners/managers and the railway operators could be contracted to reduce the rate of growth of road traffic. They would receive a payment for doing so.

8.5.4 It may be a challenge to devise a measure of reduction of growth of road traffic in terms that adequately calculate how much road traffic there would have been at any time if the railway had not acted as it did and share the risk of macro-economic fluctuations.

8.5.5 Provided that these two methods, in conjunction, are in place, Balance Research believes that financiers will fund all required infrastructure, equipment and initial operating expenses for expansion and improvement of railway operations.

## **8.6 CATCH-UP INVESTMENT**

8.6.1 This still leaves an area for government investment. Over the many decades, governments have dismantled railway infrastructure because it seemed then that the highway system would largely supplant rail for all but a limited range of tasks. Another area where governments have failed, albeit long ago when it may have seemed appropriate, is the still numerous breaks of gauge. These are still costing and still a reason for some shippers to avoid the rail system.

8.6.2 It seems likely that financiers would be less interested in railway projects if they have to invest additional funds to restore what should have been in situ. Perhaps the national government could provide incentives to state governments to restore some infrastructure and provide for further gauge standardisation projects or innovative methods to work around the breaks of gauge at no expense to operators or shippers.

## **8.7 STUDY THE EXISTING RELATIONSHIPS**

8.7.1 The first need when considering how to finance the realisation of the role of rail in stemming the undesired growth of road traffic is to study the (cash and non-cash) costs, revenues and subsidies related to transportation.

8.7.2 For this purpose, a notional “transport general account” (TGA/c) could be established, possibly under the auspices of CoAG. All costs related to road, rail, air and sea transportation incurred by any government or the community would be “debited” to it – non-cash resources would need to be priced. All revenues collected by governments relating to transportation, with the exception of general business taxation, would be “credited” to it.

8.7.3 The debit and credit amounts would be classified by mode and task, as far as possible. Analysts will deduce from this data the marginal as well as the average costs of resources used for each mode and task. The output from this would enable all interested parties to see the true and total costs and revenues for each mode and task. It will be a vital input to debate about the relative efficiencies and a guide to policy makers about beneficial subsidy and charge regimes.

8.7.4 It seems likely that when all road-related costs are known, they will be seen to be well above the total revenues from road transport. The comparison for rail is likely also to be a net “debit”, but perhaps of a lower order per unit of task. But it is likely that rail will be substantially lower than road on a marginal cost basis. This could be because much existing rail infrastructure is operating below its ultimate capacity.

## **8.8 MARGINAL PRICING, AVERAGE PRICING, AND OUTCOME PRICING**

8.8.1 Balance Research submits that governments should be encouraged to look closely at the “base case” where road and rail tasks both grow and eventually double and quadruple, and hopefully conclude that four times the road traffic will not be an acceptable outcome, albeit when some of those now debating it will no longer care.

8.8.2 The leaders of each generation are in the position of custodians of infrastructure for those who will follow. Misreading of the transport teacup led to some past leaders into failing to reserve rights of way to accommodate future needs, and to set up (or allow) costing and charging systems which today are causing misallocation of resources.

8.8.3 Transport is at a crossroads. The extant regime of charging and investing has led to a situation where major highways have been expanded and are now congested again, while investment for rail capacity is generally unavailable from government and not of great interest to financiers.

8.8.4 Marginal cost charging of road operators and rail operators will not provide finance for additional capacity. Governments will act on political realities and provide investments when massive congestion hinders day-to-day activities.

8.8.5 Average cost pricing, involving higher charges, will be politically resisted, particularly in the case of road charging.

8.8.6 Although on the traditional basis of optimum allocation of resources, marginal cost pricing is required, it may not answer the need to avoid unsustainable road growth. This may be in part because of underestimation of the social costs of road transport. Communities generally don’t want more road traffic, but the analyses do not reveal the true cost of this.

8.8.7 “Outcome Pricing” could be the name of a regime which allows rail operators and track owners to charge less than marginal cost, or provides funds for rail user rebates. The funding for this would come from the same source as for government investments in infrastructure under marginal pricing (see above).

8.8.8 This “Outcome Pricing” may seem to be a deliberate market distortion, but it could be explained as a recognition that even with quite detailed analysis, it may be impossible to put a correct value on all factors, especially negative, non-cash factors. The “bottom line imperative” is that road traffic must not grow as it has been. “Outcome Pricing” may be a better method of handling the problem than paying the industry to perform a Community Service Obligation.

## 9. COMMUNITY ATTITUDES “AMBIVALENT”

9.1 The community as a whole is thought to be uncomfortable at the prospect, if it were put to them, of doubling and quadrupling of road traffic. Nevertheless, some people and groups have also registered resistance to expansion of rail activities in their neighbourhoods.

9.2 Groups that oppose new road projects are generally unable to make much impact, and that may be understandable because (as we are at present) the relief of congestion is a paramount concern, and a new road, or wider road, is the way to do it.

9.3 It is essential, as part of the process of changing from road growth to rail growth, to involve all parts of the community including those who will be more impacted. Many of the major changes under this “plan” will be many years away. There is time if society starts now, to explore with the community, especially those still in school, the issues around road and rail traffic. Local government will be a key agent in this process.

9.4 The fact that some locations will suffer from rail expansion so that the wider community can be spared from even greater land and noise issues from road expansion may be hard for some to accept but the sooner the notion gets into circulation the more chance there is of ultimate acceptance.

## 10. CONCLUSION

**Balance Research believes that society, when fully aware of the issues, will applaud the notion of restraining growth of road traffic, improving roads for safety but allowing them to congest, provided that public transport and rail freight provide a viable alternative for the day-to-day needs of all.**

# Balance Research

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Original Submission to:

## **PRODUCTIVITY COMMISSION INQUIRY “PROGRESS IN RAIL REFORM”**

2 OCTOBER 1998

### SUMMARY OF BALANCE RESEARCH POSITION

- THE KEY PROBLEM
- THE POTENTIAL OF RAIL
- DRIVEN BY A MARKET DISTORTION
- PROPOSAL FOR INTER-GOVERNMENTAL LAND TRANSPORT STRATEGY
- PROPOSAL FOR RAIL-BASED FUTURES PROJECT
- PRIVATE CAPITAL vs GOVERNMENT CAPITAL
- THE KEY SOLUTION

*It is commonly expected that the total transport task will continue to grow in line with economic and population trends. Total task may double in twenty or thirty years, and reach four times its present level in perhaps fifty years.*

*Rail-based transportation generally uses less resources than road and air, particularly in terms of marginal resource for increments of task. Yet rail manages to attract far less of the Nation's task than it could.*

*It follows that we are using far more resources for transportation than we need to. On current policy, even with the expected "rail revival", this trend will continue.*

### **THE KEY PROBLEM**

The key problem in transport is that by the time total transport task reaches four times the present level, rail will be doing well if it maintains its present percentage, on current indications.

Thus, by that time, the road network will reach four times its present traffic level, with at least the same expansion for domestic air traffic.

Such road growth outcomes will be unacceptable to most of the community. Governments will then wish to stem that growth, but the fundamental decisions need to be taken now if it is to be avoided.

[Top of original page 2]

## **THE POTENTIAL OF RAIL**

Rail-based solutions have the potential to limit this ever-growing demand for road and air traffic.

Rail could absorb most of the increase over coming decades. The governments, acting together, could achieve this with less total transport outlay than under present policy.

Road traffic need never reach four times present levels: indeed by acting resolutely it may be possible to keep it near today's level.

In some cases, road network expansion could be forestalled with only minor improvements to the rail system so long as services are improved to meet the needs of travellers and shippers.

In other cases, major investments would be needed to make rail competitive but in no case would this exceed the long term saving to the community from reductions in road [growth].

## **DRIVEN BY A MARKET DISTORTION**

Travellers and shippers are driven to sub-optimal choices of road transport over rail because of systematically differing levels of a number of subsidy factors. These vary from the obvious to the obscure, from direct government outlays to privately suffered costs and from societal damage to global effects.

A leading factor is that rail operators are expected to pay for their infrastructure whereas road systems are not usually required to make any return.

It is almost certain that the total of transport-related costs, both community and government, far exceeds the total of all taxes and charges related to transport usage.

## **INTER-GOVERNMENT LAND TRANSPORT STRATEGY**

Balance Research is proposing an Inter-Government Land Transport Strategy.

This Strategy would have all levels of government, and all departments, cooperate in identifying transport-related costs for each transport mode and task.

Costs must include all forms of resource usage whether cash or not and whether suffered by governments, users or the wider community. Emphasis will be required on separation of network and marginal costs.

This will reveal the extent of distortion in the transport market-place and shed light on its knock-on effects on investment of land transport funds.

The next step is adopting practical measures to eliminate or equalise that market distortion and correct for its past effects.

[Top of original page 3]

Once the governments confirm that provision of road space as a free or underpriced good is leading the ongoing problem, and quantify it, they may adopt policies to restore the balance between road and rail to what it might have been without those past distortions.

Systemic underpricing of the mode which uses more resources will make it falsely attractive. Correct market signals can only be sent to users by charging adequately for that mode.

An alternative, of providing the competing mode's owners and operators with money to achieve the same (total) level of underpricing, will restore the balance but maintain the expected overdemand for all transport.

A decision to maintain effectively subsidised transport is a valid policy objective if it is clearly articulated and its effects made transparent.

The Commonwealth could play a pivotal role in this research and provide incentives for States to make the needed commitments.

An essential policy step, at this point, is that railway operations (including feeder services) must be built up to provide improved service in all domains (metro, country, passenger, freight). This requirement is dictated by the need to compensate for the past false attractiveness of road.

To put this another way, the financial imperative in rail policy must not be the rail industry's bottom line but how rail can improve the bottom line for the total transport structure.

Railway infrastructure owners must not be expected to perform better, or charge more, than road infrastructure owners and must receive the same support. Where they have not so received in the past, this must be treated as a backlog and compensated.

If this cannot be achieved, road traffic will continue to grow and thus total resource usage will continue to be above the optimum.

Inter-government financial arrangements would need to be even-handed as between modes. Even so, the Commonwealth should provide extra assistance for States to catch up the backlog of rail investment due to past policy shortcomings. It might also assist rail for reasons of national goals such as the environment and resource management.

Balance Research does not support calls for a National Rail Highway to be Commonwealth funded. All links in the system are important: the inter-capital links are the ones least in need of support, as they are almost viable at present and will be goldmines when subsidies are equalised.

Not that we say the main interstate links should not be brought up to scratch, and quickly. They must, and Commonwealth "backlog" funding should be used for this.

[Top of original page 4]

But to achieve the needed swing from road-traffic-growth to rail-traffic-growth it is equally important to restore freight and passenger facilities at all levels in the system. Rebuilding of industrial sidings. Provision of basic services on under-utilised lines. Moving goods by rail across metropolitan areas. Provision of high quality bus links into every residential area. Upgrading of tracks and services to relieve congestion on nearby roads.

We say, similarly, that the National Highway System and the RONI program should not be funded by the Commonwealth. The Commonwealth should directly support State transport initiatives in road or rail where a beneficial project might not proceed on State finance alone, and to adjust for past shortcomings.

Interstate road links, whether the NHS or any border link, should receive a subsidy from the Commonwealth based on the percentage of interstate traffic on the link. Links within cities would thus attract Commonwealth funding but only for their interstate traffic component. Similar arrangements would apply for rail links.

## **RAIL-BASED FUTURES PROJECT**

"Rail-Based Futures" (RBF) is the name of the package of policies and functional and educational programs being developed by Balance Research to implement the changes required for the Inter-Government Land Transport Strategy to succeed.

The prospect of road traffic ever reaching four times its present level is not what most people want. Governments could adopt a policy of keeping road traffic more or less at the present level: rail can be made attractive enough to achieve this.

## **RBF Outcomes**

At the target year, when total transport tasks reach four times their present level, successful adoption of the RBF policies will deliver the following outcomes (compared to "present policies" case):

- The road network will be improved with safety and quality measures but no significant net capacity growth for either Metro or Country highways.
- There will be reductions (absolute) in harmful effects of road traffic as emission and accident rates continue to improve on a total traffic task which is not increasing.
- Rail traffic will have grown by factors of up to 8 times (Metro passenger) and 30 times (country), bringing all main lines into efficient, high volume operation. Many marginal or now closed branch lines would reach economic traffic levels, vis-a-vis fully costed road transport.
- A rail freight network will be re-established in all parts of metro areas, with private sidings where warranted and intermodal goods stations every few kilometres. This will take up to 30% of HGV traffic off urban highways in the first decade and carry perhaps 80% of long-term HGV traffic.

[Top of original page 5]

- Rail freight will be re-established at most country towns, offering local carriers cheaper connections to the cities and taking much pressure off country roads.
- The road freight industry will be about the same size as today, but with greater emphasis on intermodal operations.
- Inter-capital and other long-distance railways will provide faster transit than the highway both for passenger and freight service.
- Total resource use for transport will be reduced. Less energy will be needed, and much of that will be electricity. Less transport equipment will be imported (most trucks are imported, whereas most locomotives are made here). Far less land will be dedicated to transport. The total transport labour force will be about the same but doing different tasks.
- Greatly improved and innovative passenger services will attract "non-captive" travellers. In metro areas and provincial suburbs, consistent levels of feeder bus and cross-town service will enable families to be comfortable without a car.
- Road Authorities will be able to counter the myth of "the right to drive", once high quality public transport is readily available. This will make it easier to require that persons unsuitable to drive cannot easily obtain and keep a licence: it couldn't be done under present circumstances.

## **RBF Functional Policy**

In order to achieve this result, the following inter-governmental policies and financial commitments would be required:

- Governments will cover the remaining costs of break of gauge. Either the capital to remove the problem or additional operating costs to move goods across the break at no cost penalty to the user.
- Ensure protection of all land and other assets that are likely to be required by a future generation for railway purposes. Governments will not allow the present generation to destroy that which a previous generation has put in place just because we don't value it right now.
- Ensure that at least one railway operator acts as "Universal Service Provider" on every line. This operator will be financially supported by operators who provide less than universal service. This is similar to Telecommunications industry requirements. The USP will accept all traffic offering and provide an interface to any short lines or industrial railways.

[Top of original page 6]

- Provide mechanisms for railways to be rewarded for adding value to the community and for reducing the extent of urban sprawl and the consequent savings in urban infrastructure.
- Embark on a program of public education on transport issues, to last for at least two generations. That is how long it will take to change the car-loving attitude and the expectation of driving everywhere as a matter of course.
- Ensure cooperation of all levels of government in investing the funds available for transportation infrastructure in a way which produces the most efficient network.

## **PRIVATE CAPITAL vs GOVERNMENT CAPITAL**

These changes could occur with a fully governmental or fully private rail system. As long as governments own the road system and don't charge for it in full, they would need to make equal subsidy to the operators or users of rail services, whoever they may be.

Alternately, private finance could cover the cost of new works and certain increased expenses for rail-based solutions, even if the services continue to be government operated.

In return, governments would need to pledge the savings in road-related costs until full road charging is implemented. When it is, then full rail charging will be possible too and repayments will be derived from revenues.

Using a more ad hoc approach, if governments together spend (say) 25% of total transport budgets on rail-based solutions, the total budget will eventually reduce (relatively) as tasks transfer from road.

[Top of original page 7]

## **THE KEY SOLUTION**

Of all the above points, the key factor is equalisation of subsidy. When the effects of excess road subsidy are cancelled out, users, operators, governments and financiers will all see rail as a technically efficient and profitable industry and support it accordingly.

The other strategy items could then possibly fall into place without further political involvement, other than limitation of monopoly behaviour.

To achieve this, and its promise of lower resource demands, governments will need to act on the basis of the "all government, whole community" transport costing and adjust road and rail charges to compete for all traffic on their natural merits.



# PRODUCTIVITY COMMISSION

## INQUIRY INTO PROGRESS IN RAIL REFORM

MRS H. OWENS, Presiding Commissioner  
PROF D. SCRAFTON, Associate Commissioner

### TRANSCRIPT OF PROCEEDINGS

AT MELBOURNE ON THURSDAY, 12 NOVEMBER 1998

[page 599]

... We'll now break for morning tea and we'll resume at 10.45.

MR ISAACHSEN: My name is Eric Michael Isaachsen, known as Michael, and I'm the director of Balance Research, which is basically a non-profit single person organisation.

MRS OWENS: Good. Thank you for coming, Michael, and thank you very much for the submission, which Derek and I have read. I understand you'd like to make an opening statement.

MR ISAACHSEN: That's correct.

The two main competing modes of transport are very different in their use of resources. The historical fact is that the mode which uses more resources per unit of task is offered to users with no defined user charge, whereas users of the other more efficient modes are expected to pay substantially. This of course is sending signals which ensure that the resource-hungry mode will be more and more in demand. No nation can afford to indefinitely support a more resource-demanding mode of transportation at a price systematically lower than a less demanding one, but that is what's happening.

The expectation is of transport tasks continuing to grow in line with the economy and population and eventually reaching four times the present levels. This "four-times growth factor" is a device I have adopted for purposes of exposition. It enables me to point to the logical outcome of continuing the present policies, and conversely, the potential savings in resource terms of making a deliberate adjustment to address the failed market.

Many submissions I have read have pointed to the fact that railway operations enable savings in road-related costs, both direct and indirect, to states and local government and the wider community. Some have called for introduction of road user charging but they have stopped short of suggesting a direct means of equalising the pricing basis of road and rail. Many have pointed to railway investment and operating subsidies being justified because of improvements to community life, saving of accidents, reduction of wear on the road system, and these are often described as the social benefits of railways. Railway CSO payments are often explained in terms which include these factors, but these factors can be better explained as costs of the road system.

Balance Research has gone the extra mile - or extra tonne kilometre - by proposing an overt system of subsidy equalisation between the modes. By payment of equal subsidy to each mode, market distortion will disappear, the total subsidy cost will reduce and the total resource drain of transport will reduce.

The task of equalising the subsidies implies the need to lay bare the totality of overt and hidden subsidies currently available to users of rail and road. The aim of equalised subsidies is that the end user, in making choice of mode, will be faced with prices which reflect the true differences between the modes in terms of all costs imposed on the community. Although in principle the subsidy should flow to the user, in practice it will flow to the infrastructure and service providers to ensure more and better services. Reduced fares and tariffs will, I believe, play the minor role in user choice, alongside service.

[600]

In terms of demand reduction, it is possible to argue that government should not subsidise transport at all. Once the total subsidy picture emerges, governments will need to make transparent decisions about levels of support. Governments will probably find it less unacceptable to impose collection of substantial road user charges if they have first ensured the provision of rail-based solutions adequate to meet the needs of the community for both passenger and freight.

But for as long as it is not possible or politically acceptable to collect from road users the true and total cost of that usage, it will be advantageous to make the same concession to rail users.

The process of subsidy equalisation also carries the possibility of equalising the investment levels between the two modes. Governments and private investors will be happy to put money into rail against a guaranteed cash flow from equalisation payments to rail, or full road cost recovery. This is for two reasons: the transparent subsidy process will lay open the inherent efficiencies of rail and show that it can control road growth. Governments really need to see that. Secondly, the resulting intermodal competitive neutrality will allow rail's natural advantages to attract a lot of business.

The bulk of the subsidy money will come from the same source as road subsidies. It will usually be cheaper to improve the performance of a road by building a railway for relief, and it will always be cheaper if this involves merely the upgrading of service on an existing railway. But there will be a need to blur the distinction between capital outlays and operating subsidies. That's because where you might have to spend \$200 million in capital to improve a road, what the railway may need is not capital but extra operating funds of (say) an annual \$10 million, which may still be less once it's capitalised.

The focus of transport planning must be on how to reduce the long-term growth of road demand, because that's what's eating up our resources.

Nothing against roads. Roads will continue to be vital infrastructure and the route of last resort. They will continue to be upgraded for safety and quality but not necessarily capacity. People will still be able to choose road if that's what will best meet their needs. Of course, good quality, safely engineered roads are of great importance to the community. Dangerous roads with poor services and alignment problems, not up to the standard for the permitted speed, will cause accidents. So will unchecked, aggressive driving. But it is a fool's game to expand road capacity whenever there is congestion. The expanded capacity will always be eaten up by new congestion at some stage.

This notion has fairly wide recognition but the mechanism does not yet exist to provide the rail-based means of relieving road congestion. The travellers who eat up the improved capacity of a road include many who would otherwise choose public transport. A lot of these would have been driving before the roads became congested. When it is relieved, they will revert to driving. In some years they may choose rail again. Similarly for goods traffic. Shippers are not particularly interested in the mode

[601]

used for their goods, just the service and price. If the road system is forever expanded to limit its congestion and then not adequately charged for, the road service and price will always be hard to beat. Road must be allowed to be congested at peak times. As long as a good standard of rail service is provided, people and goods will still travel satisfactorily and the political pressure will be relieved.

MRS OWENS: Good. Thank you very much for that, Mr Isaachsen. I was interested in your submission and in those opening remarks you made - but particularly in your submission you talked about future scenarios. I think what you were talking about here was the same. I'm always interested in the work that people do on these - you know, doing futures projects, and how you can look to the future and try and establish a potentially better future than if we just go the way we're going now. It can look quite dismal, so how do you change things. I've been involved in some of these futures exercises in the past and I always find them quite interesting. I'd like to come back to some of your opening comments in a minute but you talk in the submission about a target year.

MR ISAACHSEN: The page?

MRS OWENS: I'm looking at page 4. Earlier - and it might be on page 4 as well you talk about the total transport task reaching four times the present level - this was back on page 1 - but rail will be doing well if it maintains its present percentage. I think the "four times the present level" was in terms of this target year. I just need to establish in my mind, are we looking 20 years, 50 years into the future?

MR ISAACHSEN: The target year is the year when the total transport task for the nation reaches four times its present level.

PROF SCRAFTON: But do you think that might be 2020 or 2050? Do you have a figure?

MR ISAACHSEN: If one had the proverbial crystal ball - but obviously four times, depending on the growth rate and how closely transport demand matches economic growth and looking at the economic growth forecasts, it's going to be an average growth rate of somewhere between 2 and 4 per cent, they hope. So it's going to be somewhere between 40 and 70 years that it reaches four times its present level.

PROF SCRAFTON: Earlier participants have pointed out to us that that sort of time-frame, particularly the 40-year example, is about the time that we may well have problems with oil supply.

MR ISAACHSEN: Indeed.

PROF SCRAFTON: So we've had other participants who have approached it from a rather different angle than you but at the same time have highlighted the long-term need for the railway. That raises the issue of, irrespective of what you do with the railway corridors, you should protect them. Well, you don't talk about only railway carriages but all land and assets that might be used for transport in that longer-term future and not be taking short-term decisions to dispose of land and so on. I think that's on page 6, one of the dot points at the top of page 6.

[602]

MR ISAACHSEN: Yes.

MRS OWENS: There's actually an interesting article that we got in our press clippings this morning, which unfortunately I didn't bring down with me, but it's just a little snippet about something that's going on in Tasmania at the moment. There was a rail line to a mine, I think it was a manganese mine or something, and that was closed about 60 years ago. ATN is now proposing to - they're thinking about reopening a line to - - -

MR ISAACHSEN: I think there's a couple of examples in Tassie where ATN feels that they can run a train profitability.

MRS OWENS: Yes, but they're now meeting a huge amount of resistance from the locals and particularly from the farmers who have - that land has, you know, many years ago, become rural land and used for farming. So there's a real community backlash looking like it's about to erupt.

MR ISAACHSEN: It's one of the real spectres that haunt the idea of increasing rail to absorb the traffic growth instead of letting it go to road, is that increasing rail will certainly not please some people. If they're going to be near the rail tracks or near the marshalling yards, they will suffer. The total suffering may be less, because of the decreased road traffic - or anyway, compared to what it would have been - but the individuals who happen to be badly affected will scream, and already are. This is happening in not only Australia but elsewhere. So it is very much a community education need there for the long term. That's why the Balance Research project referred to in here has education as a really big part of it.

MRS OWENS: Yes. This happens everywhere you look. You often find the benefits are spread across the society and they would be spread by getting the trucks off the road, but then it's particular individuals that see that they're meeting the costs and they're the ones that speak loudest because they're the ones that - - -

MR ISAACHSEN: Yes, well, as much as people like myself call for the external costs imposed by road activity to be compensated for, as recognising the cost of road activity, that must apply to rail projects as well. If a rail project is going to make mayhem in someone's backyard, well, they should be equally justified to get compensation for it, as the people that we say should be compensated for all the trucks in their street. It has got to work both ways.

MRS OWENS: You talked about equalisation of subsidy in your opening remarks.

MR ISAACHSEN: Yes.

[603]

MRS OWENS: What do you see as being the subsidy to road - what are we equalising and what do you see as the subsidy to rail? I mean, there are some rail subsidies, like community service obligations and so on.

MR ISAACHSEN: Absolutely, yes.

MRS OWENS: So what exactly are we - - -

MR ISAACHSEN: There's a whole web of subsidies that go to transport and these come from all levels of government and they come from the wider community, in terms of putting up with the things which don't get compensated for. These are all subsidies. For example, the cost to the state government of public health programs which are made more expensive and have more implications because of road traffic - that's a subsidy to road but it's never recognised or taken into account. If there's a road traffic increase in the next few decades, traffic doubles or whatever, how much will the operating cost to the police department increase? That's a subsidy. I call for all those to be taken into account.

Then there would be hidden subsidies for rail as well as the overt subsidies and they would be similar - the cost of accidents, the cost of noise and so on. They've all got to be totted up. I don't think anyone - certainly not myself - can put a figure on these things at this stage, but I'm calling for serious research to lay bare the totality of all subsidies.

PROF SCRAFTON: Somebody told us yesterday that they thought the Bureau of Transport Economics was doing some work on - - -

MR ISAACHSEN: They have. They have published quite a lot of documents on it, but they don't really go far enough.

MRS OWENS: You're really saying that we need to spread the net very widely.

MR ISAACHSEN: Well, yes.

MRS OWENS: Quite a few of the submissions that we have had have talked about this road versus rail and talked about the sorts of things - that there are a whole lot of issues that benefit road. I've got about 10 listed here. There's payment for use of the infrastructure. The rail users have access charges. I suppose it depends whether you see vehicle registration as being an access charge or something else.

MR ISAACHSEN: Well, it's not a marginal cost so that's where the problem is.

MRS OWENS: Yes, and there's a fuel excise which - - -

MR ISAACHSEN: Which is a marginal cost but it falls unevenly, because the bigger vehicles may be more fuel efficient but per litre consumed they may do more damage.

[604]

MRS OWENS: There is another issue that has cropped up there in relation to the GST and the reduction of the fuel excise. I don't know whether you've been following that.

MR ISAACHSEN: Absolutely. Well, that comes under the heading of demand reduction, or in this case demand promotion.

MRS OWENS: So there's fuel excise and there's sales tax on vehicles. In this case it probably goes the other way in terms of the sales tax exemptions on locomotives and so on but the vehicles pay sales tax. There's the overall level of investment in rail versus road and there's a significant discrepancy there. This is government investment and private, I suppose. Evaluation criteria are different for the two different sectors. There's one-stop shop access for road versus rail. There are not, you know, dollar subsidies but they can still have an impact.

PROF SCRAFTON: It can improve the efficiency.

MRS OWENS: And there's consistent access regimes for road and there's different access regimes for rail, national operating standard for road, they're uniform, and they vary across states for rail. Accreditation systems are different for road and rail and the safety regulations are different. So some of those you would call direct or indirect subsidies and some you would say are just different environmental or regulatory things. Are you saying that we need to take account of all those regulatory differences as well?

MR ISAACHSEN: I wouldn't necessarily count them as subsidies but they may be barriers which can be whittled down over the years at no particular cost. It's just a matter of legislators putting their heads together but this featured pretty heavily in the House of Reps report and I think personally it's a bit overblown as to its importance to rail.

MRS OWENS: What's overblown?

PROF SCRAFTON: The different standards?

MR ISAACHSEN: Yes, different standards between the states. They are problems. They do exist but I don't think they're as serious as some commentators say. The ones who squeal about them - I don't blame them - are the small operators who are wanting to start up and certainly from the point of view of having potential competition as a foil to the national rails of this world, I think it's important that National Rail be kept on its toes by competitors or potential competitors but over the decades there's not going to be that many people wanting to go into the rail industry and if each state has a reason to maintain its own signalling system or something like that, I can't see that it's an enormous problem in terms of the main issue that I am on about anyway, which is the total resource drain of transport will be reduced by rail and it could equally well

be reduced, as far as I can see, by having one Australia-wide operator, National Rail, going into every state and running the whole thing except for one thing, that they will become fat and lazy if they don't have competition or the threat of competition.

[605]

But really, they would be more efficient than a lot of small operators and there's also the aspect that National Rail has never seen itself as a universal service provider and that means a lot of small towns don't get serviced. National Rail goes through there, they don't give service. If there's a company with a siding there it won't get serviced. This may be changing, and I hope it does.

But I believe that whoever is the main player in a particular geographic region or corridor should have that obligation of providing complete service to anyone who wants it, whereas a cherry-picker like SCT comes and just wants to run trains from say Melbourne to Perth, high frequency, high volume, minimal costs - I've drawn a parallel between this industry and the telecommunications industry which has a universal service provider requirement. The cherry-picker pays into a fund to help cover the cost of universal service and I think that could be applied to rail as well.

PROF SCRAFTON: Michael, one interesting feature in your submission on page 4 is you talk about not having the Commonwealth government fund the national highway system, and roads of national importance. That's quite interesting because a lot of the submissions that come before us say that what we should be doing is the federal government should be providing a sort of equal amount or a large amount for rail in order to compensate. Yours is perhaps the only submission that we've got that says that that's not the way to go, that the Commonwealth should get out of funding the highways and what resources they do want to put into transport they should be providing to the states and the states should make the investment decisions.

MR ISAACHSEN: I think that's applied to rail too. The only exception - because I'm also saying they shouldn't be funding a national rail highway as the national road highway but they should be providing backlog funding because of all the damage that has been done to the rail network over the last 30 years. Once that backlog has been caught up, if there is equalisation of subsidy, rail won't need any further support, particularly at the intercapital level. The intercapital services on rail are the one that needs least support at all to get traffic off the road. It's very near to profitable. National Rail made a loss of - I don't know the figure - 50 million, 80 million something like that. It's not an enormous amount of money compared to the total cost and compared to the cost of accommodating that traffic

on road if National Road were to close. It's very close to profitable. If they got some equalisation payment they would be making a profit and they would be only too keen to invest in further improvements to rail in the intercapital market.

It's the non-intercapital market on the same corridors, in most cases, that is the real worry - the Wangarattas, the Goulburns, the Alburys have very limited service from there to the capital city or between towns. So if you wanted to consign a container load or 50 container loads of goods from Wangaratta to Goulburn, quite likely you'd have difficulty getting it through on the rail because the sidings and facilities have been down-graded or totally removed in many cases throughout the countryside other than for bulk commodities - which of course raises another point.

[606]

The consolidated statistics for rail in each state or nationwide says how the total volume of goods going by rail has increased and they've reached new peaks and it's wonderfully efficient.

But if you take out the commodities which have to use rail - if you take out the mineral flows and the coal flows which are not contestable by road to any great extent - then you're looking at general goods going by rail, it's a very different picture and it's a very desolate picture. Without doing something about that, the road traffic will grow and grow and grow as I've foreshadowed and rail will, as I said, be lucky to maintain its percentage. If rail doesn't increase its percentage road and rail will both grow to four times [their present tasks]. I don't think the community really wants road to grow to four times and is looking for a solution. It will become a political hot potato but what I'm worried about, it mightn't become a hot potato until 20 years' time, by which time more and more damage has been done. It has got to be looked at now.

MRS OWENS: So who looks at it now?

MR ISAACHSEN: Probably the new transport planning body that is being talked about.

MRS OWENS: The National Land Transport Commission.

MR ISAACHSEN: That's the one, yes. Probably they look at it. In England they have the Strategic Rail Authority which is doing the same job and it's only just starting so they haven't got a track record yet but they have to look at the road and rail scenario.

PROF SCRAFTON: That's a good parallel though. The Strategic Rail Authority was not put in place until they had some sort of crisis. That is the rather sad aspect of planning, that people don't deal with it until the damage has already occurred and that's one of the things that your submission is trying to point out, that if you leave it then it will just be more difficult and particularly if you let the asset decline.

MR ISAACHSEN: Yes, the previous government in England set up all the private railway operators - freight and passenger - and the rail track company to provide the tracks. They didn't foresee, 5 years ago when they set all this up, how things would pan out and there is an increasing demand for rail which is good because they've decided not to build major extensions to the freeway network but that's just making a crisis.

They have failed to go the extra step of giving additional subsidy to rail operators and rail service and infrastructure providers to be ahead of the demand. You've got to look ahead of the demand. They think they are in England looking ahead of the demand but I say that they're only looking 10 years ahead, not enough. Still, it's a step in the right direction and as you say, once they began to get into difficulties, the new government has set up this body, the SRA, which can only do good if it goes far enough.

[607]

MRS OWENS: But it hasn't really got going in any - - -

MR ISAACHSEN: No, it only started a few months ago.

PROF SCRAFTON: It was an initiative of the incoming Labour government a year ago.

MR ISAACHSEN: Correct.

PROF SCRAFTON: You mention in your paper also that if given the limited investment and so on, that you would prefer to see a fund - relating to that, you would get better return for funds which go into improving the existing system rather than necessarily building new lines or extensions or so on and I just wonder how you feel about the way in which investment in railways is being spent now, given that you have all these high profile projects - - -

MR ISAACHSEN: What's being spent now? There's things in the pipeline but I don't know there's much being spent right at the moment except for coal lines and heavy mineral traffic.

I believe it's extremely important to upgrade the existing lines but of course there is always scope for new lines and I think the mere fact, if it ever happens, of the availability of subsidy equalisation - don't forget equalisation doesn't necessarily mean the rail subsidy goes up. It could be that the road subsidies are cut out, but that's politically difficult and probably won't happen. Whichever way they're equalised, once that happens investors will come out of the woodwork to build new lines anywhere across Australia like the ATEN proposal through the outback. It's perfectly viable so long as it doesn't have to face road transport which is heavily subsidised unilaterally.

The very fast train from Sydney to Canberra and hopefully extended to Melbourne could be providing an additional track which, although it would be dedicated to passenger service, ultimately in practical terms the two tracks will provide relief to one another, particularly in the event of breakdowns and congestion and that sort of thing. It can only do good and there's supposed to be no net cost to government, no net cost to the taxpayer and it will be so long as you have a broad enough definition of cost.

In addition to the statement that I already made at the beginning of this hearing, I've got a few comments that I've added in to the original document, just a few explanations and amplifications.

MRS OWENS: That would be useful because I was going to - I don't know what they are at this stage but I was going to see if you would run through some of your - - -

MR ISAACHSEN: There's probably one or two points on each page.

MRS OWENS: Okay, that would be very useful because I had a couple of questions on each page.

[608]

MR ISAACHSEN: On page 1 at the bottom, the last paragraph about growth outcomes not being acceptable, it really covers what we were talking a moment ago.

PROF SCRAFTON: That while we're making plans we need to plan for it now.

MR ISAACHSEN: Yes. By the time it becomes unacceptable and becomes political, governments by that time will have rediscovered rail as a substitute for road and air growth but it will be impossible to achieve the needed outcome if the action waits until the problem is that acute. If you've got questions on the particular page do you want to come to it at the same time?

MRS OWENS: Yes, okay, I think we'll do that. I wanted to clarify, when you were talking about intergovernment on page 2, intergovernment land transport strategy, and I think we've just covered that too, whether that would be the National Land Transport Commission.



MR ISAACHSEN: It would be, yes. This is just, you know, my formula for it, which I haven't finished putting documents together about it but it's the direction I'm wanting to - -

PROF SCRAFTON: There is machinery now but it tends to be ineffective. I think that's the point. What we're looking for here or what you're suggesting here is that we need to have an intergovernmental land transport strategy which is effective. We've heard participants and we mentioned in talking between ourselves before that there have been efforts in the last ten years to try to do this but unless there is a commitment and a comprehension of the long-term significance of what is being done, you just get a succession of reports one after the other which is a problem that we face even in the work that we do.

MR ISAACHSEN: Yes, well, there certainly have been a lot of very fine reports from this organisation and its predecessors, and many others, and they're all on the shelves.

PROF SCRAFTON: Although, as somebody pointed out to us yesterday - I think two participants did yesterday - that if you look back and do a little check list, which we will be doing in our draft report, we think about the current problems and the future problems as you have done. But a lot of changes have been made since 1991. It's amazing, the number of Industry Commission rail reports prepared. But you're quite right. I mean, that's - - -

MRS OWENS: Yes, the Australasian Railways Association actually did a three-page check list on the recommendations from the 1991 rail report and went through and divided the recommendations into those that were implemented by the rail industry itself and those that were meant to be implemented by government, and just went through and did a bit of a check on what was achieved and what wasn't achieved.

[609] MR ISAACHSEN: I've had a bit of a look at it.

MRS OWENS: Yes, and I might refer you to the transcript because we had a bit of a discussion about each of those, because we did question where they'd said that access regimes had been put in place. We questioned that. I mean, it's true that we have been moving in that direction but - - -

MR ISAACHSEN: Some other witnesses might have thought they weren't quite in place yet.

MRS OWENS: Yes, exactly. Can I just ask you - just coming back to the inter-governmental land transport strategy, that would involve local government as well as the others?

MR ISAACHSEN: Absolutely. I think they're a key player, particularly when it comes to persuading people to change their habits.

MRS OWENS: Yes.

MR ISAACHSEN: Because they're the level that really knows every individual and certainly the local companies that shift goods. Just in that section, talking about studying the costs, the third paragraph, Cost Must Include all Forms, talking about average cost is misleading and that's all we get from a lot of commentators and a lot of reports say the average cost of this and that. I have at times read that every train traveller is being subsidised by, say, \$2.43 per trip because the subsidy was \$486M and there were 200M trips - and that's what they tell the public and they say, "What an enormous subsidy to go to [each] rail traveller[]." But a great part of that cost is on the network cost and the basic service structure.

If the patronage were to double, the subsidy needed for the extra trips might only be, say, \$50M or 25" per trip, or maybe even zero if the marginal costs were equal to fares. As against that, what would be the marginal cost of that increase of a further 200M trips going to road? This would be related to continuing the urban sprawl with its additional

infrastructure of costs, not [just] transport infrastructure but general urban infrastructure costs from urban sprawl, on top of the obvious road related costs like accidents, policing and so on.

In the previous section, Driven by Market Distortion, another factor that distorts the market - it's inevitable but there is a difference between road and rail in regard to safety standards: the far higher safety standards of rail, more expensive vehicles, more expensive operational systems, rigorous training and no scope for individuals to beat the system. It's an enormous difference in cost. If road had to comply with that sort of safety standards, you know, they'd be out of business. My next comment is on page 3 if you haven't got anything - - -

MRS OWENS: I had some questions on page 3 but we've discussed them as we've been going. So whereabouts on page 3 are we?

[610] MR ISAACHSEN: The fourth paragraph, Maintaining Effectively Subsidised Transport. This is about demand reduction. The subsidy for rail and subsidy for road need to be very closely looked at because there may be a link into the matter of transport subsidy from world trade policy, which is being looked at. The issue of defining subsidies in services is very much a live issue in WTO negotiations and it's very important, quite essential, to be sure that subsidies to road operators are identified as well as subsidies to rail operators. We don't want them to come along and say, "Well, WTO says you can't subsidise the rail." We're already subsidising the road. It has got to be made clear.

MRS OWENS: That's a very useful point. I don't think we've actually given WTO a lot of thought in the context of this inquiry. But you've just raised an important point in my mind, thank you.

MR ISAACHSEN: At the bottom of page 3, talking about investment and that Balance Research do not support calls for the National Rail highway to be Commonwealth funded as such and so on. I would just like to say that I think once the inter-capital links have caught up to what they would have been under better past policies, no ongoing funding will be needed, and in the case - - -

MRS OWENS: But you mentioned earlier about inter-capital links.

MR ISAACHSEN: Yes.

MRS OWENS: What happens if they're not viable, or do you think they will be?

MR ISAACHSEN: They will be totally viable. They will be goldmines.

MRS OWENS: Once you've equalised the subsidies.

MR ISAACHSEN: Well, certainly with equalised subsidies and certainly even - - -

PROF SCRAFTON: Just with the capital infusions?

MR ISAACHSEN: Certainly with the capital infusion which I regard as a catch-up or backlog payment rather than an ongoing investment need. Any future investment needs will be met by the users, because once you've built that track up to standard it will beat road. Don't forget - I mean, I'm sure you wouldn't have forgotten, but it was not that many years ago that the government of the day was considering duplicating and electrifying the whole way from Melbourne to Sydney. Now, if you had a 160 KPH electrified train service for goods traffic the stuff would be in Sydney in less than 8 hours and it would have unlimited capacity in terms of the next few decades. There would be no need for road expansion whatever.

MRS OWENS: Can I ask you just before we get off it, the backlog funding that you're talking about, are you talking about the same level of backlog funding as, say, the Neville inquiry?

[611]

MR ISAACHSEN: Something like that, yes, 3 billion or something.

MRS OWENS: So 3 billion.

MR ISAACHSEN: I mean, obviously the scope to look at going beyond what they've talked about. They've talked about what's really necessary to bring it up to reasonable fast freight train standard in today's service. I might be inclined to [advocate going] a little beyond that in terms of what it would have been now if policies had been different over the last three decades and if policy had been different, well, it would be even better than the standard that is now considered the minimum. I mean, the \$3 billion brings it up to the minimum standard. It's not necessarily the standard or the capacity to prevent future road growth and to do that, probably at some stage you would have to at least have a double track.

Now, the question of electrification is really outside this because the trade-off for electrification is not in speed of service, it's in terms of emissions mainly, more than anything else, and that's another issue and I feel - well, it's also in terms of resources, of shortages of liquid fuel in decades to come. That will justify the electrification, if it ever does. But at least if there was a double track all the way from Melbourne to Sydney it's going to cost a lot more than the 3 billion, but it will save far more than that in road expansion, road maintenance and all the nasties that come from that.

Just expanding on that a little without trying to duplicate, yes. The highway could never aspire to an 8-hour transit from Melbourne to Sydney or it should not anyway. Some truckies might do it but they shouldn't be.

This improved service, that's the double track, would be capable of absorbing all inter-capital growth for some decades. The only further capital investment would be needed when the expanded railway is nearing saturation and at that time it would have to be decided whether the government would pay for that or whether the operators, because the inter-capital traffic is going to be a goldmine, once it improves service over road.

The operators will probably pay for that, but the thing is at that time we might be looking 30 years down the track. The government might decide that they would rather not just improve the capacity of that railway but have an alternate railway as a back-up. It could be a railway via the east coast down through Nowra and through Orbost and Bairnsdale, or there could be a railway through the middle like the ATN group proposed and the government might decide to invest in that for security reasons. But as far as just capacity growth, I don't think there would be any further [government] investment required - quite likely that the private capital would do the upgrade.

But "truly inter-capital" traffic probably accounts for less than half of the total transport demand on this corridor. The non inter-capital or wayside rail services have been allowed to wither on the line. Many stations have lost most of their facilities and restoration of these wayside services will automatically follow when the availability is there of equalised subsidy payments. But some backlog investment would still be necessary to restore the lost facilities.

[612]

PROF SCRAFTON: There is evidence that those sorts of traffics are being sought out by some of the smaller operators, some of the niche operators. Already there's evidence of that being leaked out.

MR ISAACHSEN: Yes, that's right. I mean, you look at Austrac which runs from the Riverina into Sydney. Now, some people describe that as a short line because their actual operating territory is only a short line from where, Junee to Griffith or something. But it's not a short line operation in the classical sense because - - -

PROF SCRAFTON: It doesn't feed the lines.

MR ISAACHSEN: It doesn't feed a line.

PROF SCRAFTON: It actually runs on it.

MR ISAACHSEN: It runs its mainline services. There has been talk in the last couple of years of debate with the House of Reps committee and previous inquiries about short lines being encouraged in Australia and Austrac is held up as an example of it. But really any branch line that is under threat or has been closed and wants to reopen, they should be able to pick up traffic on that line and have an interface at the junction, and that is with the "universal service provider" that I mentioned before.

PROF SCRAFTON: Right, you mentioned that.

MR ISAACHSEN: That obligation, if it's not written into the rules when National Rail is sold or FreightCorp is sold and so on, then I'm afraid it won't be done because it will be an additional cost to them and that will prevent quite a lot of traffic from adopting a rail solution. It will force the increase onto the road - as long as these operators are able just to run between the big towns and forget the branch lines. So we don't want that happening.

MRS OWENS: Do you think it will be written into the rules?

MR ISAACHSEN: I don't think it has been thought of.

MRS OWENS: Don't you?

MR ISAACHSEN: I don't know whether you can correct me there, but I've never heard any mention of such things. But I think that short lines are important and that's not what we have in Australia to any extent at this stage.

On page 4 I've just got a very brief comment about the rail-based futures approach. In the second paragraph of that, "The prospect of road traffic ever reaching four times" - and government could make rail sufficiently attractive, as it says there. I'd like to say that I believe that governments could make rail sufficiently attractive to absorb the growth, probably at no net cost to government and certainly at no net cost to the whole community. It depends just how wide you spread your net of what is cost. But I do believe that [such an augmented] rail system could absorb all the growth for the next time to come, but of course it is ultimately going to be a compromise. It may absorb quite a worthwhile amount of growth but under current indications I'm afraid it's only going to absorb its own share of the growth.

[613]

PROF SCRAFTON: I think that's a very important contribution of this period. That is, that a lot of the effort that has been made in rail reform might well result in railways just keeping up with the game, if we could call it that.

MR ISAACHSEN: I'm afraid so.

PROF SCRAFTON: Not actually using its competitive ability to actually capture the - - -

MR ISAACHSEN: I might add that in the main paper which is still in preparation an important part of it is, private railways which don't carry public traffic at all, like the sugarcane and the iron railways, should also get a subsidy equalisation payment if the work they're doing is contestable by road. If a major ore mine is going to set up I don't think that it applies because road is just not viable. But if you get a new sugar farmer and he has the option of using road or the option of spending \$1,000,000 on putting in rail, if he decides to do that he's keeping his trucks off the road to quite a large volume of trucks and I think that the state road authorities and the local council should reward them for doing that, which at the moment they don't.

PROF SCRAFTON: Not that we've heard anything about the sugar tramways, but those that are there seem to continue, but do you see new ones or railways shifting from one - - -

MR ISAACHSEN: You see expansions of the existing networks as farmers come on line with a new farm or a new acreage. This is only by reading the sugar mills' report. I must say I haven't been up there, much as I'd like to. But they have to bear the cost of it. They work out that it still is cheaper for them to do that than to use the road. But that's still not enabling them to be rewarded for saving the local authorities and the state government millions and millions of dollars. Recently they needed a crossing, a rail crossing across a highway, and they were made to spend I think \$3,000,000 on making it grade separated just for the seasonal traffic. That should have been given by the government because - - -

MRS OWENS: I suppose the government is going to say, "Well, they're going to do it anyway so we'll save our money," and - - -

MR ISAACHSEN: Of course they are, but in general - I mean, there will always be marginal cases where they decide not to go on rail.

[614]

PROF SCRAFTON: Yes, that's right.

MR ISAACHSEN: Because they're not going to get any recognition and it's of only marginal saving to them, or none in some particular case - depends how many miles of track they want to - - -

MRS OWENS: The government is never going to be able to identify those marginal cases.

MR ISAACHSEN: They could probably work out some kind of ad hoc basis for doing it, or do it on a tonne-mile reward even, you know, 1 cent per tonne-mile.

PROF SCRAFTON: Particularly given that governments do that all the time. Using the grade separation example you used - you know, if a bridge falls down or looks dangerous in an existing metropolitan situation, the government will not hang around arguing about who should pay for it. They do the job first and then the bills get sorted out later - you know, maybe a local council working with the state government and the railway organisation. But there are precedents for solving the problems.

MR ISAACHSEN: Yes. But now they've started the new sugar industry in the north of Western Australia, and as far as I know they are going to use road transport only for that. Who knows whether they might have decided to use a more environmentally friendly means of transport? I don't know whether the road they're using are private roads, but if they are that's one cost saved by the government but there's still the cost to the community in other ways. I think it would highly desirable for any kind of activity which puts traffic onto a more environmentally friendly system to get some kind of reward or recognition.

MRS OWENS: If you'd like to just run through the rest of them. We're just running out of time, Derek has pointed out.

MR ISAACHSEN: Sorry. Under RBF Outcomes, just explaining - I've said rail traffic will have grown by factors of up to eight times or 30 times, and you might have wondered how I get these figures. Just to look at the arithmetic, if rail is carrying 25 per cent of a certain corridor's flow and road 75 per cent, that's 100. Let's call that 100 units. In some decades the total flow may be 400 units, and if government policy were to adopt what I'm talking about they would want to retain the road traffic at its present level and let all the growth be absorbed by rail, putting money into rail, not road, because you put less money in. So the total task will eventually reach 400 units but the highway demand is pegged at its present level of 75 units. So the rail is then carrying 325 units, 13 times its present level. If a corridor carries only 5 per cent on rail, that figure comes out to a factor of 61. It becomes meaningless when you get to the very low levels. That's how that arithmetic works out.

[615]

MRS OWENS: Thank you.

MR ISAACHSEN: On page 5, rail freight re-established in most country towns. A new paradigm is needed to assess what is the rail demand. In the past, and even at the present time, railway operators look at their own loadings and decide whether to increase or decrease services. This would be valid on an already busy railway, but to assess the demand for services on an under-utilised line, typical country branch line situation, it's essential to be looking at the total traffic in the corridor. If there are 2000 cars each way per day but only one or two trains each way, it's not very informative to look at how many people are using the train.

Halfway down the page, talking about captive travellers and non-captive travellers and what levels of feeder buses and cross-town services are needed, I believe there are in fact millions of families in Australia who would be glad not to own a car so long as their needs could be adequately and safely met by public transport, and innovative services are needed. These might be combined rail and hire-car, combined rail and overnight parking, combined rail and shopping delivery services, that sort of thing.

PROF SCRAFTON: We've had a lot of submissions too from people who say combined rail and bikes.

MR ISAACHSEN: Absolutely.

Under the Rail-Based Futures Functional Policy, the second point, about for as long as it's not possible to collect road user costs, to "adjust the rail charges to ensure the same level of subsidy" - of course, that's oversimplification. It's not just a matter of adjusting the charges, because much of the subsidy would in fact go to infrastructure and service providers.

Just over the page, protection of assets: it's not only land but valuable infrastructure and equipment that should be saved. For example, Victoria's government is not using its one and only electrification of a country line. 60 kilometres of this electrification have been dismantled and the remaining 40 kilometres are due to be dismantled shortly. That goes from Pakenham out to Traralgon, now to Warragul, and they're going to cut that back. Obviously there's some chance that electric trains will be warranted again in a country service, and they've destroyed a lot of that asset and they intend to do the rest. I think they should have another think about it.

PROF SCRAFTON: Could I just ask you a question about that? Was that because it was due for replacement? Very often the electrifications are not - the point at which they're abandoned is when major maintenance or replacement is due. Is that the decision - - -

MR ISAACHSEN: I can't give a definite answer of that, but certainly parts of it would not be due for replacement. Perhaps the contact wires are worn out. Maybe some upgrading would be required if they were going to run a fair dinkum service on there, but the cost of installing this plant is enormous if they have to put it back. But I'm worried about intergenerational equity, because it will be the next generation that's got to pay \$200M to put that back.

[616]

Unwanted locomotives are scrapped while they're still serviceable because the operators, mainly governments, think, "Well, traffic is going down. We've got some new locomotives. Why would we want more locomotives?" But if traffic happens to go up a little bit and there are opportunities there for branch line operations, which are now viewed rather in a "down" attitude, these old locomotives, although they're not as efficient as the new ones - they use more fuel, put out more smoke, but if you're using them in every small way at least the locomotives are there. If someone says, "I'd like to use one. I've got four wagons to

bring in from somewhere to somewhere else," you send out the old loco. You don't have to wait and say, "We can't give you service for 4 years because we'll have to buy some more locos to do this."

About the universal service provider [notion], which is mentioned [earlier], it is said that National Rail refused to carry certain traffic types earlier in its career. It possibly didn't suit their chosen methods of operation. Possibly the margin wasn't in it for them. Some of that traffic went to road and some went to innovative operators, but only for very long hauls. So National Rail, as the state railways had done, turned back certain traffic opportunities because they didn't have any pressure. I believe now National Rail is only too happy to carry vans, but at some stage, so it's been recorded in evidence, they wouldn't carry vans. SCT came along and hired 200 vans and ran their trains and now National Rail are happy to carry vans. I hope that's true, but that's what I've heard.

The program of public education - I'd just like to add that this should include a new emphasis on railway technology and railway management in tertiary studies and a reinvention of something pretty simple, enthusiasm for railways at all levels of education. It's totally gone.

PROF SCRAFTON: We haven't got time to talk about that, but that is a very important topic. There is a perception of railways in the community which will not engender the sort of changes that you want to see unless it can soon all be changed.

MR ISAACHSEN: Yes, that's right.

PROF SCRAFTON: There is on the one hand the attitude - the old steam trains and on the other extreme you've got the concept of new high-speed trains and Maglevs and so on, but the guts of the railway, what the railway does in its everyday business, is not understood.

MR ISAACHSEN: No. That's why I've chosen to make a big point about education.

The other point I'd just like to draw on - I haven't heard it mentioned anywhere - I've called it "Why the community subsidises urban rail or urban transport." What is the value to the community of having a commuter rail or transit system? "Okay," they say, "it's to keep cars off the road, to keep cars out of our suburbs and minimise local pollution; avoid the need to build more and bigger main roads and reduce the road toll; control urban sprawl and blow-out of public infrastructure in greenfield suburbs; promote a higher-density living; and all these things."

[617]

By means of "political evaluation" the avoided cost of these detriments reflect into the amount that government is willing to pay for that avoidance. Availability of suitable transport for those unable to drive is also a consideration but maybe a by-product of the more pressing needs. So if the subsidy paid for railway infrastructure and operations is, say, \$1 billion per annum, that is the lowest valuation put on the benefits of the railway.

The final thing - I'd just seek your indulgence - is to comment on a couple of findings of the House of Reps committee.

MRS OWENS: Please do.

MR ISAACHSEN: It's not anywhere in [the submission]; it's just something that occurred to me last night - well, it occurred to me when I read that report, but occurred to me to mention it to you. I've got a few reservations about their recommendations. While the overall thrust is excellent, just what the nation needs, there are some details which warrant a comment. One is about double stacking of interstate freight. They've made quite a strong mention of this, but in the very long term the need for it may not be that apparent, particularly if there are ever going to be double tracks between the capitals, because the main benefit from double stacking is to have shorter crossing loops. Of course, on double

track that really doesn't matter at all. Also there is a conflict between double stacking and the long-term need for electrification. I don't think you can have both.

PROF SCRAFTON: You probably could but you'd certainly have to plan for it, as you said. The clearances you would require are enormous.

MR ISAACHSEN: The clearances would be enormous, but whether you can have a locomotive with a pantograph that high - - -

PROF SCRAFTON: Long enough, yes.

MR ISAACHSEN: I don't think it's been tried. The other thing that they've made very strong mention of is fuel tax hypothecation. They don't like it. They feel very strongly against - - -

MRS OWENS: I think they're not saying they don't like it; I think they say it doesn't happen.

MR ISAACHSEN: That's right, and they recommend that it be more clearly struck out of the legislation to make it perfectly clear that there is no such thing. But I think there's a bit of a weakness there. They recommend very strong against any perception that fuel taxes are road taxes. They could have recommended to make them that way, but they recommended to make it totally clear that they are not road taxes. The reasons for their conclusion are perfectly valid from a parliamentary point of view.

[618]

However, this does little to change the natural perception in the minds of road users that they are paying a tax for driving. In turn, this makes them feel that they are paying for the road, no matter what Mr Neville says happens to the money. They see that railways receive subsidies but they don't see that road operations also receive subsidies because, as far as they can see and feel from their pocket, they are paying.

The alternative suggested [] in the Balance Research [document] - Intergovernment Land Transport Strategy [] - could be considered, in which the whole of the fuel tax, less the obvious deductions, is paid to the states for transport-related purposes. The deductions would firstly be the part of the tax which is the equivalent of the normal sales tax, then the amount spent by the Commonwealth and any amounts paid under tied grants.

The balance would be divided among the states on some equitable basis - they'll probably fight over it - and it would be found, I suggest, that states already spend more than this amount on transport-related matters, including policing, hospitals, public health, urban transit, road-building and maintenance and grants to councils for all the above. So this scheme would not involve any increase in payments, just identification of some part of the existing flow, and at the state level it would not involve any changes in outlays but allow a public focus on the real cost of transport.

That's it.

MRS OWENS: Thank you very much for that and thank you for all the time you've spent with us.

PRODUCTIVITY COMMISSION: 12 NOV 1998: BALANCE RESEARCH. [end]



# Balance Research

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Submission (in Reply to Draft Report) to:

## **PRODUCTIVITY COMMISSION INQUIRY “PROGRESS IN RAIL REFORM”**

21 MAY 1999

### **PART ONE - INTRODUCTION**

#### **Competition**

In its Draft Report, the Commission is acknowledging the need to have road and rail competing in the market on a fair basis. It is calling for full cost recovery from road users, or at least some of them.

**But it is silent on the means, or the need, to correct the distorted market while waiting for full cost recovery.**

#### **Improved Efficiency**

The report credits the railway industry with improvements in efficient operations. The reduced costs per unit task is not disputed, of course.

**The report does not however examine the extent to which these improvements are due to shedding of less profitable tasks and whether these tasks, now on road, use more resources than before.**

#### **The Yardstick of Success**

In considering the future of the railway industry, the yardstick seems to be whether the industry will be commercially successful.

**The opportunity was not taken to consider the alternative measure of railway policy, namely success in controlling the growth rate of road traffic.**

#### **Tax Reform and Transport Resources**

The report considers the effect of proposed tax reform including reductions in taxes on diesel fuel. It records likely reductions in operating expenses for rail and road.

**These reductions would be expected to increase total demand for transport and also to induce a further swing from rail to road. Alternatives could be devised which might avoid these effects while still achieving the government's aim of helping rural business.**

[Top of Original page 2]

## **PART TWO**

### **Competition:**

#### **COMMERCIAL OPERATION OF HIGHWAYS**

The main thrust of the Draft Report, in regard to future directions, seems to be that the road industry should move towards user charging with the result that both road and rail would operate commercially.

In terms of the need to reduce the resources used by transport, such an outcome would be very welcome. That is to say, the elimination of all subsidies to transport would effect a substantial modal shift to rail and it would also lower the demand all for transport. The effect on resources demanded for transport would thus be a significant reduction, which would be good news for the community's wellbeing.

The limitation of this approach is that it may take many years to have effect and it is doubtful whether governments would ever be willing to collect from road users the totality of subsidies.

Elimination of all subsidies is but one permutation of the notion of equalising subsidies.

The submission of Balance Research was that while effective road usage charges are not in place, rail usage should be subsidised to remove the market distortion. As governments introduce RUC's, subsidies to road and rail would decrease in unison. In the submission it was argued that funds spent on equalisation of subsidies would be less than the savings in road-related costs.

The necessary precursor to subsidy equalisation is a study of all subsidies, overt and hidden, cash and non-cash, by governments and by the wider community.

The question of equalising subsidies is one of allocative efficiency and of choosing whether to continue favouring a particular mode. This is doubly important if the mode presently being favoured is the one which uses more resources per unit of task.

The question of whether there should be any subsidies at all is more political than economic. Cheaper transport has benefits socially and industrially and for this reason it may be unwise to rely on governments exacting substantial charges on road users as a means of redressing the imbalance in subsidies.

## **PART THREE**

### **Improved Efficiency:**

#### **EFFICIENCY IMPROVEMENTS BY CHOICE**

It is also noticeable that the rail industry is credited with having become more efficient in recent years. Balance Research does not dispute that the resources used per unit of railway task have

[Top of Original page 3]

decreased, indicating an improved technical efficiency. However over this time the composition of the rail task has changed, with vast increases in bulk tonnages and some decreases in general cargo.

In order to assess the potential benefits and resource savings of policies which might transfer tasks from road to rail we must confine our gaze to those tasks which are contestable as between road and rail.

And in that arena, railway operations have become more efficient mainly by shedding tasks which were less profitable. These tasks have gone to road in which they use up more resources than on rail but have the appearance of efficiency.

## **PART FOUR**

### **GENERAL COMMENTARY**

#### **The Major Economic Challenge**

Balance Research believes that the greatest challenge for the transport and economic communities is to chart a course which will avoid the major expansion in transport-related resource usage which under present policies seems inevitable.

It seems to be widely accepted that the total transport task will continue to grow more-or-less in line with economic development.

That total activity and presumably total transport task will eventually double is not widely disputed. Just the time-frame for the doubling is open for debate. For example, elimination or reduction of transport subsidies will downgrade the link between economic growth and transport task growth. Debates over the nation's target population widen the range of the time-frame. Long-range outcomes for major mining projects are capable of greatly influencing the eventual date of doubling.

It is a useful exercise to remove from consideration of the growth rate of transport any significant tasks of a kind which are never likely to use the highway system. These are mainly mine output flows which use shipping or rail.

While the rest of economic activity continues to expand, it is possible that mine output will not. A decline in mine output could entirely mask a pattern of continuing growth in general transport. The result of that could be that while more and more traffic is demanding more road space in most parts of the country, aggregated statistics could show that there is no problem because the total transport task is not growing.

#### **Doubling Again?**

It is also possible that the total task will double again so reaching four times its present level. Again this will be influenced by eventualities in population, transport subsidies, including or excluding mining flows, and economic conditions.

[Top of Original page 4]

Despite reservations, it is probably safe to act on the assumption that having doubled, the growth of demand for general transport will continue at some rate and may eventually reach four times.

#### **Inter-Generational Equity**

On continuation of policies as now envisaged, most commentators would seem to be quite content if rail maintains its overall share of passenger and general freight tasks.

If this comes to pass, future generations will feel the impact of four times the car and truck traffic.

To cater for this, highways will need to grow substantially in country and populated areas. Injury and death from road traffic will continue to grow despite improvements in the statistical rates. And land which could have been retained for railway use will in many cases have become alienated, making it extremely costly to engineer a solution.

Depletion of oil and gas is also a matter of inter-generational equity.

Within the 20th century we have used up most of the accessible deposits laid down over billions of years. We are largely ignoring opportunities to convert transport to other sources of energy, and are using oil and gas at a faster rate each year. When these useful fuels become scarce, our successors will not thank us for using it up so quickly without thought for them.

## **Federal Issues**

The Commonwealth should play the lead role in this reform. That's not to say they should pay out all the money. Their role would be to lead, persuade and facilitate.

Reform of something so fundamental as road and rail must be the work of all three levels. A study of government involvement with transport must cover all governments and all departments.

The outlay by all governments of one dollar to facilitate subsidy equalisation will lead to a benefit of perhaps two dollars. The Commonwealth's contribution may be in the nature of a catalyst.

## **The Challenge for Railways**

For road traffic to grow less than now contemplated, rail must do more, much more, than maintain its percentage of the transport task. However efficient the industry may become, it will not increase its overall share of general transport while the market remains distorted.

It is a credit to the innate efficiency of rail that despite the distorted market it can provide, for example, intercapital transport at prices competitive with road and require just a very small subsidy ... far less than the unquestioned subsidies to highways.

[Top of Original page 5]

## **Railway Viability vs. Transport Efficiency**

A number of commentators have couched their views on the future for railways in terms of whether the railway industry will be viable. Will there be a place for rail, and can it expect to attract sufficient traffic to make it commercially worthwhile?

Balance Research offers the opinion that these are not the critical questions when considering the future needs of the nation for efficient transportation.

The critical question is whether rail-based solutions can be found which will lead travellers and shippers to choose not to use the highway. If so, the growth of highway traffic can be controlled and the long-term outlook for resources improved.

Solutions must include not only the technical improvement in efficiency but the correction of market signals accompanied by changes in attitude.

The attitudes of travellers and shippers, governments and academics, and providers of transport services are not well-tuned to a major swing from road to rail. Many accept that there should be some change but are only expecting marginal growth.

Privatisation, level playing fields, harmonisation of systems, one-stop negotiations, with improved technology and management, will all make rail's future more certain. But these will count for little in economic outcomes if not accompanied by changed attitudes.

Balance Research believes that with the right signals and the right attitudes, substantial changes are feasible which would save governments and the wider community from the ever increasing costs, losses and resource drain which they will otherwise face from [road] transport.

[Top of Original page 6]

## APPENDIX "A"

### The Arithmetic of Trans-Modal Growth

To study the kind of rail growth that may be needed in decades to come, an informative exercise is to see what rail system growth is required if the nation decides to reduce road traffic growth to zero, that is to keep road traffic at its present (say year 2000) level by improving rail-based services.

Future traffic task is assumed to reach four times its present level in the year "X4".

#### Example A

A corridor where rail presently carries 50% of the task:

Year 2000: total task 100 units

Rail task 50 units

Highway task 50 units

Year "X4": total task 400 units

Rail task 350 units

Road task 50 units

**Thus rail traffic needs to grow seven-fold to absorb the increasing task without expanding the road system.**

#### Example B

A corridor where rail presently carries 20% of the task:

Year 2000: total task 100 units

Rail task 20 units

Highway task 80 units

Year "X4": total task 400 units

Rail task 320 units

Road task 80 units

**Thus rail traffic needs to grow sixteen-fold to absorb the increasing task without expanding the road system.**

#### Example C

A corridor where there is no rail traffic at present:

Year 2000: total task 100 units

Rail task 0 units

Highway task 100 units

Year "X4": total task 400 units

Rail task 300 units

Road task 100 units

**Thus rail traffic needs to be established and carry three times the present road traffic task.**

Of course it is not certain that rail could totally absorb all task growth, but if governments made it their aim to do so, these examples indicate the implied scope of rail development.

# PRODUCTIVITY COMMISSION

## INQUIRY INTO PROGRESS IN RAIL REFORM

### DISCUSSION ON DRAFT REPORT

MRS H. OWENS, Presiding Commissioner  
PROF D. SCRAFTON, Associate Commissioner

#### TRANSCRIPT OF PROCEEDINGS

AT MELBOURNE ON WEDNESDAY, 26 MAY 1999

[page 967]

MRS OWENS: Our next participant today is Balance Research. Would you like to give your name and your position with Balance Research for the transcript?

MR ISAACHSEN: I'm Eric Michael Isaachsen, but known as Michael, and I'm the director of Balance Research [] .

MRS OWENS: I was wondering, do you want to make any opening comments or address anything that you've written in your submission?

MR ISAACHSEN: Yes, I'd like to make an opening statement.

The commission's draft report provides little to indicate how governments might produce policies to change the unhealthy balance between road and rail transport. It is important to change the balance because road transport uses more resources than rail.

Governments levy no direct charge on road usage, and the resulting false attractiveness of road transport naturally increases its share of the total task, leading to congestion and demands for more and more road space, demands which governments are unable to resist.

In its chapter on competitive neutrality the report recommends at 9.1 a more commercial approach to railways and provision of road infrastructure. A commercial approach to the provision of road infrastructure? What does that mean in terms of the whole gamut of road-related costs? A range of costs have been evidenced by many participants and acknowledged in the report. It's not just a provision of maintenance of the infrastructure that needs to be made commercial. Not even the addition of a rate of return on the road capital stock would make it commercial.

Whichever way road user charges might be collected, if roads are to be commercial, the charges must reflect the total cost to governments at all levels, all departments, and the cost to the wider community. But, you might protest, the recommendation only says more

commercial, not fully commercial. Yes, but look at rail, particularly intercapital freight. It's not far from commercial now. It even pays diesel tax, which arguably goes to road projects. The recommendation says rail should be more commercial. If it is any more commercial than now it would be just about fully commercial. So in the context of neutrality, road would have to be fully commercial too.

Can you really foresee governments introducing road-user charges that cover all costs on all kinds of user? Or even just on heavy goods vehicles? If it's only on heavy goods vehicles, does this mean that there will be no incentive for car and smaller truck owners to change to rail? The fact is that if substantial road-user charges ever come to be, it would be when there is a major political shift, perhaps when the people have come to a greater realisation of the never-ending growth of road traffic or when other road-related problems reach a crisis point.

[968]

What does the commission recommend in the intervening 10 or 20 years, waiting for these full road-user charges? It's obvious what the commission is not recommending. It's not recommending the Swedish model or anything like it. The Swedish model is seen as a means of reducing costs to rail operators as compensation for road subsidies. The model is repeatedly criticised in the report. First you say on page 203 that the data and analytical burden would be quite onerous. Even if it is, the alternative is even more onerous. To do nothing about the distorted market until the cows get back or until road-user charges come in, is to continue wasting government and community resources for years.

[969]

You expressed concern in footnote 6 that debate over differing estimates may leave scope for lobbying. So what's new? Is that a serious reason not to at least partially equalise the subsidy? Next you mention the unease in the Swedish case between the operator and the track owner, each wanting to set the priorities with some political input. That's hardly a condemnation of providing cheaper track access. There is almost a hundred per cent political input in this country right now in regard to road and rail investments. After that you say on page 204 that this approach may involve costs in budgetary terms. Well, yes, until its effects in reducing road-related outlays kick in it may take brave governments or far-sighted ones to make the move and spend some transport funds on rail, although in Australia with the federal system, the Commonwealth would not have to make all the payments.

The states and local government would make the greatest amount of savings from a long-term slower road growth. So they would possibly be glad to cover the costs of the track owners or other subsidy equalisation if the Commonwealth gave them the lead, and presumably some incentive. In the same paragraph you referred to likely resource misallocation resulting from setting prices below marginal costs, and attracting more activity in the transport sector. Of course, that's exactly what happens in road transport. Road access is well below marginal cost, and demand for road space is phenomenal. Just an aside here: on increased subsidies, that would reduce the cost of transport and increase demand.

The Commonwealth wants to lower the taxes on diesel fuel for road and rail. What will this do to allocative efficiency? Of course, it would always be open to governments when planning some kind of subsidy equalisation to increase taxes on the road system by a small amount - that is, not a full road-user charge - at the same time as improving rail services, so avoiding an increase in the total transport task. I would also take issue with the paragraph on page 205 about differences between the Swedish and commercial approaches. First you say that under the commercial approach private sector incentives and disciplines have greater scope to determine investment and pricing.

This is arguably not the case if it means that railway track owners and operators have to work with the traffic that they can attract with the present strongly flawed market. Unless and until the market can give correct, relative price signals to the end-users, commercial discipline will equate to very limited role for railways. On the contrary, if rail track owners and operators receive subsidy equalisation to carry extra traffic on an agreed and transparent basis, they will then be able to determine investment and pricing and make their own investments. Up to now, they cannot determine either.

[970]

The funding for subsidy would be based on money which will be saved by governments and the community. Sure, the statements you have [made] about the commercial approach would be valid if full road-user charges are achieved. No subsidy goes to any player whether freight or passenger, country or urban or interstate, and in that case it would be good for the nation's total resource drain, and full discipline would apply, but that's not going to happen.

Secondly, where you say:

"Rather than using one mode by investing or adjusting pricing to curb the externalities of another mode ... "

you're making an implication that by subsidising rail, rail would be curbing the externalities of road. The fact is that the excessive externalities due to road traffic are due to the unequal subsidy. They will not be fixed by rail. They will be fixed by either no subsidy or equal subsidies. It doesn't make much difference. Your conclusion, in italics on page 205, infers (a) that a commercial approach would promote competitive neutrality, and (b) that linking rail and road subsidies would not, or not so well.

I hesitate to say it but it flies in the face of commonsense. Commonsense says that fully commercial charging of road will never happen. You're not even suggesting that it would in regard to other than heavy goods traffic, and even then, we know what happened last time the truckies faced substantial charges. Commonsense says that although it would be desirable from a resource point of view and allocative efficiency, to decrease total demand, [starting by] correcting the relative prices between the modes will begin to limit the rate of road growth.

The marginal cost of task transferred to rail is much lower than the marginal savings from that [amount of] task leaving the road system. Or the marginal costs of new tasks coming on and being handled by rail is much lower than those tasks coming on and having to be accommodated in the highways system. Continuing on the theme of your criticism of the Swedish approach or your use of the Swedish approach as a proxy for equalised subsidies, I come to the section starting on page 205 headed "A Land Transport Commission". You say that under the Swedish approach, governments directly have wide-ranging responsibilities for railways, including planning, investment and pricing.

I feel that this is not necessarily so. Once it has been decided by governments that they and the community don't want to see ever-growing levels of road traffic and its concomitant costs, they can offer the necessary equaliser to any operator who is willing to provide better services or better prices. It would then be up to that operator, whether government or private, to make the necessary investments to achieve that.

Leaving the Swedes alone now but sticking with the Land Transport Commission question, your report sees problems with such a commission having responsibilities in planning, investment and pricing. Your reason is, as you put it, responsibility for road and rail provision rests with governments, primarily state governments. I would say that this has always been the problem. Governments decide on investment priorities partly on a political



basis. If roads are popular, that's a reason to build more. A government at this stage is not going to upgrade a railway service to relieve a congested road. No, they want to widen the road and provide for faster flows. A suitable commission, Land Transport Commission, might take the longer term view: marginal increases in railway traffic once the line is there are cheap. Increases in road traffic costs dearly [long term]. A commission could look at this more evenhandedly.

I'm not sure what the reference page is, but turning to the question of taxes and charges - -

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[971]

MRS OWENS: Page 207.

MR ISAACHSEN: It's my belief that until better defined road-user charges become available and politically achievable, fuel taxes are the nearest thing to it. They are in effect a proxy user charge and would be regarded by most road users as an input to their decision-making. Diesel tax on heavy goods vehicles is particularly deficient in its relationship to road-related costs.

So we hear from many commentators that it is deficient. If so, these vehicles should be charged a diesel surcharge, not a rebate. Railway users pay the diesel tax and don't like to see it used for road purposes. The government says it's not used for roads; just goes into general revenue. What Balance Research has been saying is that all the diesel tax should be treated as a land transport charge, apart from the sales tax equivalent and possibly a carbon tax equivalent.

This land transport charge would then be available for outlay on road and rail projects, not in proportion to the road-rail split of taxes but on the best projects for the nation. Some of this could be the seed funding to states for introducing subsidy equalisation payments.

There is a view that the total taxes from road users, excepting normal business taxes, give governments a profit from road activity because the outlay on road construction and maintenance is less than the revenue by quite a margin. I believe that the total cost to all governments and all departments of government from road traffic would exceed the revenue. Adding in the usage of non-cash resources would presumably show an even greater margin of road costs over revenues. Then you can add in the fair return on the capital value of the road system - the fair return forgone - then the unmet depreciation of roads, particularly local roads that don't get maintained.

Accordingly it would be feasible for the Commonwealth to hypothecate 100 per cent of the fuel taxes to road-related purposes, most of it through the states, without increasing road expenditure at all. It would only be an accounting move but it would show that the taxes are far from excessive. That is, some of this road tax would go to the hospitals, the Health Commission, the police and other things which use up money but aren't normally regarded as road expenses but are road related.

[972]

I was disappointed really with the fairly sparse dealing with the question of passenger services, and these are dealt with as far as I can see solely as the purchaser/provider issue, with payments considered as social services and CSOs.

Passenger service arrangements can be converted to a commercial model, with operators rewarded for improving the modal split. And I believe that if the correct valuation is placed on the cost to the community of motor traffic and this largely hidden subsidy is then paid to rail operators, they will be commercial. This of course is similar to the arrangements for franchising of passenger operations in Victoria and the UK.

The difference in the UK - and the Victorian details I don't think are known yet - the difference in the UK is that operators receive an agreed sum per annum and as far as I know cannot get more money even if they provide more and better service. If that more and better service does not make a profit they won't do it. It has to wash its face against the publicly-funded motorway system.

So what I'm saying is that the passenger rail operators should be able to get more if they provide more service and get more cars off the road, and that's another form of this subsidy equalisation.

In regard to freight service, Bob McKillop who gave evidence yesterday - his model for a split-up of New South Wales was very interesting, with whole chunks of the less-used parts of the system being sold off, possibly to local interests. This would make those areas a bit like the USA, a short-line model. One aspect about the short-line model that hasn't been dealt with in this report or previous reports like the parliamentary one is the fact that when a class 1 railway sells off a line to a short-line operator they then have an obligation to provide what they call switching service.

The [Australian] short line, like the one at Austrac at Junee, doesn't particularly seem to have that arrangement. If it picks up a load at Griffith it's got to then carry that whole load up to Sydney, even if it's only 20 wagons, and it's not efficient. It won't work that way in the long run. If there's going to be short lines the main line carrier must have an obligation to give them service, and this could be likened to the universal service obligation imposed on telecommunication carriers. At the moment it's only Telstra but other carriers could get into that. If they want to be the main carrier for an area they've got to do certain things in a certain way which mightn't always be economical but that goes with the territory.

If FreightCorp wanted to sell off the western region, FreightCorp must guarantee that operator [the purchaser] that they will take his goods down to Sydney or Newcastle or link it in with National Rail or something of that kind. Universal service obligation is one way of describing it. The operators are generally required to carry the other operators' traffic. Any operator, even another short line, would have to carry - say if I buy one and you buy one, you've got to carry my traffic when it gets to the [handover] point, and we can either agree on rates or go to arbitration for rates. Otherwise the system breaks up and [shippers] can't send a load of stuff from Walgett to Dubbo.

I was of course disappointed that the report couldn't take up the point that Balance Research raised in its original submission, about urban freight going to rail.

[973]

Urban freight is growing like every other aspect of transport and it will continue to grow, continue to demand more and more road space, and it would be possible for rail to re-establish urban freight centres and carry quite a load around the metropolitan area, probably at night. And I believe that if governments don't ever do that they're making a rod for the community's back in regard to, say, a few decades down the track, and there'll be just demands for more and more freeway space for goods vehicles, many of which are carrying low priority materials, stuff that's regular shipments of goods that are not all that urgent.

Of course there's always going to be [clients] that [] ring up and they want it now. A train wouldn't be any good for that, but there's plenty of [goods moving] on the urban [] freeways, Westgate freeway and South Eastern freeway [or] just on the arterial roads, which easily could be moved overnight by rail, and I'm disappointed that you haven't found it possible to ask the government to look at that in any way. A very interesting aspect has come to my understanding about the way in which the rail industry has improved its efficiency in the period under review, the last 10 years and probably before that. There's no doubt that the technical efficiency of freight services has improved - that is, the inputs

versus the outputs - but quite a degree of this is due to selectively getting rid of tasks which aren't that profitable. Because the road system is - in my view and obviously some other people's view the road system is subsidised a bit unfairly as against rail. If rail didn't get rid of those tasks it would be running at a great loss, and it's not allowed to run at a loss, not a great loss, anyway. So they've had to get rid of a lot of the smaller and less efficient tasks, which brings them somewhere near commercial reality.

But those tasks now on road that were previously on rail are almost certainly using more resources, but it looks more efficient. And National Rail for example, and probably Freight Corp for that matter, V-Line Freight, don't want to handle it because they can't compete against the subsidised road. If they were given a subsidy equalisation payment, either for all that traffic or for certain traffic where it's pretty obvious that that traffic would otherwise go on the road, they could again handle this. It would pull down their efficiency in terms of technical efficiency but it would increase the efficiency of the total transport system.

Just a comment if I may on the benchmarking debate, which I've heard with great interest, but I really feel that it's a waste of effort trying to benchmark Australian - any particular operation against, say, the class 1 railroads. You've got to look for an example in America, Germany or anywhere else you like of a similar task, and you probably can't look at the aggregate of Australian tasks and look at the aggregate of any other area.

It would be a really worthwhile exercise for someone to look at for example V-Line Freight handling of general cargo containers and that sort of thing and see where in the world there are efficient railways carrying that sort of volume and that sort of distance, and just see how it stacks up against that. I think if you can't do that, benchmarking is really deceptive. Of course once you do start looking at individual areas like that you may find that the Australian operation, given the amount of market distortion that it's facing and given our distances and our thin population, is probably working pretty well.

[974]

[975]

I also raised in my original submission - or was it in my verbal evidence? - the possibility of the World Trade Organisation making objection to subsidies for freight on commodities that are exported from Australia, and I just wondered whether your commission would find it possible to deal with that particular area and get evidence from someone who knows about it, which I'm not claiming to. I'm just saying it's an issue.

And Balance Research has changed the name of part of its project, which used to be Rail Based Futures. But thinking about it and getting involved a little bit in the tax debate and driving it a little further, what I'm calling for is resource-aware transport planning, and I think that pretty well describes the drive that I have in all these issues, is to see how transport can be conducted with less resources [per unit task] than it is at the moment.

There's been some interesting discussion on path auctions and I think a point that's sometimes missed when people talk about passenger trains perhaps getting a little more priority than they really deserve. I'm not saying that doesn't happen, but you'd really have to weigh up the effect on road traffic and road traffic growth if passenger trains were to become less reliable or perhaps substituted by buses in off-peak times.

Would this mitigate against people deciding that they didn't need a car and that they could depend on rail at all times? It just may be counterproductive.

And as against that you've got a load of 5000 tons of coal and that's going to be delayed for half an hour because the cost of that money is held up. It may not be that the coal shipper is going to be particularly upset by half an hour's delay. Obviously that can be weighed up, and some very fast goods trains with general commodities, that may be more important.

But really the conflict between the passenger and the goods traffic, be it in Sydney or out on the branch lines, is really one of the track owners not providing sufficient capacity for the traffic that is there and hopefully will expand. That's my opening statement completed.

MRS OWENS: Good. That was a very comprehensive run through both your submission - and I think you've raised quite a few additional points. And I remember you have raised the issue of the WTO before, and we did check with one of our colleagues on that particular issue and my recollection was he said that at least in the short term it wasn't something he felt would be picked up by the WTO. That may be - - -

MR ISAACHSEN: No, it probably won't in the short term, but I mean we've got to look ahead to a situation where we're not going to find that subsidising rail is picked up as an unfair subsidy to export trade, whereas subsidising the road, which has been going on forever, is deemed to be okay.

MRS OWENS: I think if they are going to look at one, they have to look at both, I presume.

MR ISAACHSEN: That's exactly the point, that I'm worried that they won't.

[976]

They'll say, "Well, every country in the world subsidises road, so that might be all right, but if you subsidise rail, watch out." I don't think you could rule it out in the long term, because other countries will do anything to make life difficult for the Australian export trade. I think we've seen that often enough.

MRS OWENS: We saw it with Howell Leather. We'll go through some of your points and Derek, I know, has probably got a few questions, but you did run through such a lot in such detail, I've only got a few questions. The issue relating to auctions and the fact that it might have the effect of putting people back into cars if passenger trains don't have priority - you actually argue the other way, that if some of the freight trains don't have priority, it could push some of that freight back onto roads, into trucks.

MR ISAACHSEN: You would have to balance it up on a case by case, but there seems to be a doctrinaire approach. For example, you've probably heard of the healthy train policy in dispatching trains, that if a train gets to be late - it doesn't matter why - it will stay late and other trains may proceed. If it happened, that would wreak total havoc with passengers and it may have a very obvious and immediate effect on passengers' confidence, whereas if a goods train is late - well, there are some cases, I grant that, where it's really high priority goods and if the train gets delayed more than once or twice a year, they might not be very forgiving, but that really comes down to a capacity issue if it's going to happen that often.

MRS OWENS: One of the other issues that you raised was this issue of urban freight and I guess, again, we've got this conflict with the use of those networks for passenger services and whether that would just compound that problem if you were to set up - - -

MR ISAACHSEN: Not if it's done in the off-peak and particularly overnight. I couldn't imagine that. I mean, it's worth looking into is what I'm saying and it hasn't been taken up as a point to be looked into.

MRS OWENS: I suppose, increasingly, there's the issue of logistics and what is the most appropriate way, most efficient way of getting things from A to B within cities.

MR ISAACHSEN: I'm glad you said "most efficient", because that's what I'm talking about. In other words, how much resources is it using to move 10 tons of bricks from A to B, which may not be that urgent, normally ordered well in advance? If they go three-quarters of the way by rail, will that reduce the resources required, even though it means it's an overnight journey instead of same-day journey?

MRS OWENS: I suppose with your bricks example, they need to go to the supplier, it would have to be picked up in a truck, it would then have to be delivered to the rail depot,

it would then have to be loaded onto trains, it would have to get off at the other end and be loaded on trucks.

MR ISAACHSEN: With appropriate technology, for example, a containerised brick-dispensing unit. In other words, the brick dispenser is a truck with particular [?] on it that carries the bricks and those bricks could leave the factory in a container with the [?] around it, be transported by rail and at the destination, as near as possible to the destination - I'm talking about in 10, 20, 50 years' time there could be, if governments wanted to go this way, a series of intermodal rail stations around metropolitan areas and those bricks could arrive at Heidelberg at 3 am and be loaded onto a vehicle which would then take them to the site and that vehicle has the crane to unload them and so the container just sits in a cradle on the vehicle.

[977]

That's just one example, but that's an example meant to be of low priority goods, where really logistics is not an issue. The other thing about logistics: the present situation is that rail transport is not available for a lot of moves, particularly around metropolitan areas, and even for interstate moves it's more or less the same price as road. That's because road is so cheap, so rail has to be cheap and can't give the service that it might otherwise give. If the prices were to change, relatively for the same service, road would become dearer and it may not be tax charges or road-user charges, it could within a few decades be energy which makes it dearer.

Once there's a change in the relativity in rail and road of 10 or 20 per cent, which may come from any source, we may find that quite a lot of these people who say, "I want this just in time and I want it exactly at this time." "It's going to cost you 20 per cent more because now road is dearer." "Well, maybe I'll [order] it the day before."

MRS OWENS: But then there will be incentives for perhaps the private sector, if they see that there are opportunities on urban networks to deliver using trains, they will come into the market.

MR ISAACHSEN: I'm sure it will be done by private operators, but the governments have to be aware of it and have to make sure that they don't dispose of suitable land for these facilities. The land exists in many cases now, but it's gradually being sold off, converted to other uses. It's got to be planned for, and I'm not saying that they need to have it in by the year 2000.

MRS OWENS: Michael, one of the other things you said in your opening comments and you referred to in your submission is this possibility of - you talked about a 10 to 20-year gap before the road issues are addressed and I wasn't quite sure why it would take so long and you said, "What do we do in the meantime? Let's stick with the Swedish-type approach and subsidise rail."

MR ISAACHSEN: Yes.

MRS OWENS: However long it takes, aren't we going to run into problems if we go that way? Once you have put in subsidies, it's really hard. If you're saying it takes 10 to 20 years to actually deal with the issue of subsidising roads, it means you'll never ever get rid of any of the subsidies.

MR ISAACHSEN: If I just turn to my latest submission, the question of removing the subsidies is really a political one. It's not an economic issue. The question of the two subsidies, if they exist, being equalised is really a question of allocative efficiency as between different modes and as one mode uses more resources than the other - so that's quite important economically - the question of whether there should be any subsidies at all is more political. Cheaper transport has benefit socially and industrially. For this reason, it would be unwise to rely on governments ever removing those subsidies.

[978]

MRS OWENS: I don't think we're suggesting that governments would not subsidise, say, urban transport systems. I think that there is probably every reason to believe that there would continue to be some community service obligation there.

MR ISAACHSEN: But that subsidy to urban rail is only because of the subsidy to urban road. You couldn't imagine that they would remove the subsidy to urban road and start charging for driving down the local street and even the arterials. You couldn't imagine that they will ever do that, and it's only because they do that, that there is a need to subsidise urban rail. If there were no roads or the roads were so poor and never got widened and never got upgraded and congestion became even more endemic, railways could charge a commercial fee and have a wonderful return, but because governments keep putting new roads and wider roads and will always do that, that's the only reason for subsidies. I would like to see the terminology go away from calling these "CSOs".

They're not CSOs, they're just matching the road subsidy - the direct and the indirect and the hidden subsidies of roads matched by these payments which are called "CSOs", but that's a confusing term; it just confuses the issue.

PROF SCRAFTON: I guess in one sense, Michael, they're called "CSOs" because people didn't like them being called subsidies.

MR ISAACHSEN: No. That's right, because they couldn't identify that road was getting a subsidy.

PROF SCRAFTON: Helen, I don't have any additional questions. You've covered the ones that I wanted to ask about. I think the key one is this issue of the gap, as you perceive it, of it taking many years and introducing compensating subsidies. I think that, out of your paper, that is something that we need to think on.

MR ISAACHSEN: I think that is absolutely my key issue, all the others are peripheral to that. I couldn't agree with the idea that just because rail gets a subsidy now, to match the road subsidy, that that means they would never be abolished. The need to abolish subsidies - or more likely to reduce them slightly - once they've been equalised, if governments decide that there is really too much activity in the transport industry because of it being subsidised, which is a point that you've made in your report, that's fine and they should reduce them. That is a matter of very macro-economic policy.

PROF SCRAFTON: You yourself argue that; that there is a challenge to avoid that expansion. The one thing you don't want to do is to encourage unnecessary use of the network, an overall resource picture that you talk about.

[979]MR ISAACHSEN: I'm really not in favour of any subsidies at all, but it just would be unrealistic to say that governments would ever do away with all subsidies and if you only do away with subsidies, for example to heavy goods vehicles, that means the uncontrolled growth of urban passenger and urban freight traffic on the road will never have anything done about it.

MRS OWENS: Is there anything else you'd like to - - -

MR ISAACHSEN: No. Thank you very much for the opportunity.

MRS OWENS: Thank you for coming and thank you for sitting in the audience yesterday and today.

MR ISAACHSEN: It's been very educational.

MRS OWENS: I was very pleased that you picked up the comments that Bob MacKillop made yesterday, and I think fleshed that out a little bit for us as well. I thought you made a very interesting point there, so thank you for coming, Michael.