INQUIRY INTO PACIFIC HIGHWAY UPGRADES

Organisation:	C.A.R.S (Community	Alliance for Road	l Sustainability)
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Name: Mr Tony Gilding

Telephone:

Date Received: 24/08/2005

Subject:

Summary



C.A.R.S (COMMUNITY ALLIANCE FOR ROAD SUSTAINABILITY)

16 August 2005

The Director
General Purpose Standing Committee No. 4
Parliament House
Macquarie Street
Sydney NSW 2000

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RECEIVED

To The Director,

CARS (Community Alliance for Road Sustainability) would like to thank the Legislative Council for establishing the Inquiry, to report on the impact of the proposed upgrades of the Pacific Highway. It is allows us, the community, to take a constructive approach so as to hopefully add value to the process currently being undertaken by the RTA.

CARS (Community Alliance for Road Sustainability) is an umbrella group of communities on the north coast who are seeking a transport outcome consistent with long term good planning for freight transport, other road users and the impacted local communities.

Please find enclosed our submission for the Parliamentary Inquiry along with a three minute DVD exhibiting some of the hazards of the Pacific Highway. The presentation demonstrates that some improvements are required on its existing alignment for the needs of local and regional traffic, but it also reveals the need to have an alternative inland route. This could be achieved at a far more modest cost that avoids negative impacts on communities and can be designed to be economically preferable for road transport and other through traffic.

With this, we formally request the opportunity to present our submission in person to the Standing Committee of the Legislative Council.

Yours sincerely,

Tony Gildina

CARS (Community Alliance for Road Sustainability)

7-2-5

The following community groups support the objectives of CARS –

- Bangalow Chamber of Commerce
- Bangalow Community
 Alliance
- CEPS
- Coffs Harbour
 Woolgoolga Area
 Residents (W.A.R)
- Ewingsdale Progress
 Association
- Knockrow Newrybar
 Residents Group
- Ocean Shores
 Community
 Association

Immediate Objectives:

- 1. Interstate trucks must be moved back to the New England Highway **now**.
- An appropriate safety upgrade of the current highway must be made urgently.

Long Term Objective:

3. A suitable motorway or tollway must be constructed away from communities.

Email: info@cars.org.au Web: www.cars.org.au



C.A.R.S (COMMUNITY ALLIANCE FOR ROAD SUSTAINABILITY)

Parliamentary Inquiry

Impact of the Proposed Upgrades of the Pacific Highway 19 August 2005

General Purpose Standing Committee No. 4

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Coffs Harbour Woolgolga Area Residents (W.A.R) • Ewingsdale Progress Association

Knockrow Newrybar Residents Group • Ocean Shores Community Association

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Submission to the General Purpose Standing Committee Inquiry No. 4. Inquiry into the Pacific Highway Upgrades.

Executive Summary

This paper will investigate the economic and related social impact of the proposed Pacific Highway upgrade on agricultural, rural and other industries in the study area, between Tintenbar and Ewingsdale. This paper outlines the economic importance of the study area. The study area incorporates land of significant rural importance and includes areas identified as being State Significant Farmland under the DIPNR Farmland Protection Project. The red soils, largely of volcanic origin are rich and fertile and the area has reliable high rainfall. In consideration of the projected impacts of global warming on the viability of rural productivity this is of considerable importance not only for New South Wales but also for the whole country.

Valuable agricultural and horticultural industries will be economically affected by the proposed development of a new highway corridor. The loss of land, production and jobs will have a substantial follow-on effect for the towns, schools and all services in the area.

The paper also addresses the social cost of the upgrade including issues relating to:

- Safety
- Noise
- Health
- Property values
- The value of the Byron Brand
- Other impacts on residents

The proposed motorway will have a substantial and long-term negative impact on the area. The area urgently needs an upgraded highway along the existing route and the state needs a new Sydney to Brisbane motorway on a new road corridor. However this area does not need and cannot reasonably cope with both.

This paper addresses the terms of reference.

1.b) The level of upgrade proposed for this section and the remainder of the Pacific Highway.

The proposed new motorway with allowance for six lanes, a road corridor width of up to 200 metres, a gradient of less than 6% (preferred less than 4.5%), entry and exit points approximately 17 kilometres apart and a 110 kilometre per hour speed limit is not suitable in an area of high density, intensive agricultural production. In addition the study area incorporates large

sections of unique scenic escarpment, which the proposed upgrade will destroy.

There are major issues associated with the economic impact of the level of upgrade proposed which will be discussed under points c) and d). In addition there are serious concerns with regard to noise, safety and emission levels.

The proposed upgrade is in fact not an upgrade of the existing road but a high speed interstate freight and vehicle route in addition to the existing Highway. The RTA estimates that 70% of the current heavy vehicle traffic on the Pacific Highway is interstate freight. This will leave the existing Highway as the major route for local and regional freight, local traffic and tourist traffic. It is predicted by the RTA that the NSW intra freight volumes will increase by 88% over the next 10 years and that passenger vehicle traffic will increase at a comparable rate. The existing Highway has a number of serious black spots and is not able to cope with current local traffic volumes, let alone the projected increased volumes. The proposed upgrade will not address local and regional traffic requirements.

The area urgently needs an upgraded highway along the existing route and the state needs a new interstate freight motorway on a new road corridor. However this area does not need and cannot reasonably cope with both. With its lower population densities, its more marginal rainfall and less intensive productive land, the New England Highway (gazetted National Highway) is far better suited to be upgraded for interstate traffic.

With the projected increase in both interstate and intra state traffic volumes the associated increase in noise levels and emission levels will have a serious impact on the health and well being of people in the surrounding areas.

1.c) & 1.d) The impact of the highway upgrade on prime agricultural land including the expanded study area.

Immediate Economic Impact

The study area is 7292 HA (18,230 acres) and contains 6,000 homes. (source ARUP). Based on sales in the area prior to the announcement of the study area, it is estimated that the average rural land value is \$10,000 per acre. This equates therefore to a land value of \$182,300,000 for the study area. 6,000 houses at an average of \$400,000 would equate to \$2,400,000,000. Currently properties in the study area are considered to be blighted and as a consequence there have been few sales since the announcement. Agents report that potential purchasers are requesting only to see houses outside the study area. It is therefore difficult to estimate the impact on values. However the general consensus amongst local real estate agents is that overall there will be approximately a 20% reduction in house values. Given that the current local government land zonings prevent subdivision, the value of housing stock is difficult to separate from land value. A 20% reduction in house values alone means an immediate loss of \$480,000,000 dollars. This, in itself, is a substantial loss to landholders and in many cases represents people's superannuation.

There are some 65 properties with substantial houses that encompass expansive ocean views. Some of these houses in themselves were valued at 2-3 million dollars. Whilst there may be little sympathy for these house owners it should be remembered that many of these are self funded retirees and that this in fact their superannuation. Valuations for areas of the Highway already upgraded to the north of Newcastle the reduction in value of houses within a 100 metre radius of the Highway has been between 50-80%.

The impact of highway proximity on land values we believe is not sufficiently regarded as an evaluation criteria by the RTA. Nor has the RTA included in their evaluation criteria recognition that people have paid a commensurate price to locate away from the Highway. Many of whom sought advice and information from the RTA at the time of purchase was assured that there were no plans for the route to pass through their land. Likewise many have purchased along the existing highway knowing that is had been zoned for a future upgrade and paid a commensurate price. On the other hand in some instances the proximity and access to the Highway is important for people's businesses. These people would be severely disadvantaged in a relocation.

Agricultural Importance

The study area has a number of distinct agricultural advantages. The study area is divided by the escarpment and consists of an undulating volcanic plateau and coastal plain. It consists of Krasnosem soil which provides for highly productive agricultural cultivation. (Overview of Land Use In The Study Area & Constraints – Tintenbar to Ewingsdale Upgrade; Agricultural Focus

Group Meeting No.3#) The mapping of the Study area indicates that there is a pocket of State Significant Farmland and considerable amounts of Regional Significant Farmland. Under the draft Farmland Protection Policy, currently before the NSW Government, state and local government agencies proposing public infrastructure on such land should select alternative sites where possible (p. 29). There are alternative routes outside the study area.

The sub-tropical climate results in relatively warm winters and mild summers. The topography of the area creates microclimates which are ideal for intensive production. According to the NSW Department of Primary Industries, rainfall for the study area averages 1607mm per annum, whereas the bulk of the State has been declared drought stricken for extended periods over the past five years. In June 2005 91.2% of the State was declared drought stricken, in July this figure was 89% and in August following extensive rain it was 87%. The study area falls within the 5.2% of the State outside the drought regions over these periods. (www.agric.nsw.gov.au/reader/drt-area) To reduce this small area even further lacks foresight and contradicts long term sustainable planning initiatives and guidelines.



Drought Map for NSW July 2005

The combination of reliable rainfall, fertile soil and undulating land, has supported intensive agriculture since the late 1800's. At the turn of the last century the Bangalow district was the largest dairy farming area in the Pacific. With the deregulation of the dairy industry, an increase in land values and the subdivision of larger acreages there has been considerable development of other agricultural and horticultural industries and value added businesses.

The area now supports a diverse range of agricultural industries. This includes macadamia plantations, coffee plantations and processing and packaging plants, stone fruit orchards and packaging plants, cattle, sugar cane, market gardens, farm gate produce, mature tree farms, agri-tourism and commercial nurseries. Value added products also generate considerable income for the region from both domestic and export sales.

Many of the products grown and produced in this area are done so using organic farming methods. These products attract premium prices, in line with the increasing popularity of the organic food industry. The Byron Bay name has become an international marketing tool and much of the produce from the study area capitalises on the additional value that this brings.

The study area encompasses a band of rich agricultural land and has attracted people with a broad range of skills. Thus the skill diversity of the area is far broader than is usually found in rural communities. At a global level this part of the world is unique.

It has been estimated that value added products from the study area will contribute at least 50 million dollars in revenue over the next 6 years. This is a conservative estimate and assumes that the bulk of the macadamia harvest is sold as whole nut without value adding. The value of particular industry's are covered in greater detail further on in this paper. If an additional motorway is developed in the study area it will divide and in many instances destroy intensively used agricultural areas, this will substantially undermine the economic viability of those properties and impact on the economy of the area as a whole.

Quality of Life

Combined with the climate and location, the study area is renowned for the quality of life it affords. The visual beauty of the area with its natural vegetation, springs and wildlife add to its residential attraction. The area

supports a rapidly growing population and an ever increasing tourist industry. An increasing population results in an increased demand for local goods and services. Increased demand creates opportunities for the growth of new and existing local businesses. People are shifting towards a healthier way of life and preferring to purchase local produce from farmer markets and farm gate stalls. The lifestyle and natural beauty of the area is of significant value in itself and contributes to the economic significance and value of the brands it supports.

Industry

The following valuable agricultural and horticultural industries are significantly threatened by the proposed Pacific Highway upgrade. This will result in a loss of jobs, a loss of livelihood, the loss of considerable capital investment and losses for the community as a whole.

Beef Cattle

Beef production is one of the leading income earners at around \$20 million a year for the wider area.

With high rainfall and rich pasture, the study area is perfect for breeding herds that produce store weaners, vealers or growing out/finishing steers. It is estimated that a 100 head semi improved pasture vealer production unit; averages a gross margin of \$263.79 /ha and gross farm gate value of \$343 /ha. (NSW Department of Primary Industries) A unique feature of this area is

that cattle are fattened and sent to market for export. This is of major significance, especially in times of drought. Thus it can be seen that the loss of this area for this purpose will also jeopardise the viability of cattle farmers in more marginal areas and rob them of the ability to fatten cattle prior to sale. (Overview of Land Use In The Study Area & Constraints; Tintenbar to Ewingsdale Upgrade; Agricultural Focus Group Meeting No.3# - Joanne Walsh)



Cows grazing on the flats with Macadamia and Sugar Cane behind.

Shot in the expanded study area.

Case Study

The Jarrett's are cattle farmers on 300 acres at St Helena (one of the few remaining large landholdings). The property has been in the family since 1907. The Jarrett's are agents for 110 local cattle owners and based on their sale records and export figures the study area contributes some \$10 million

per annum. If the proposed Highway development goes ahead along one of the proposed routes the Jarrett property will be divided. As with many other owners the Jarrett's believe that this would have a major detrimental effect on their business.

Macadamias

Macadamias are the single biggest horticultural earner in the study area representing 43 % of the total Northern River's horticultural value. There are approximately 2,000 ha in the study area with at least 500,000 trees with a potential production level of 12,000 tonnes. At approximately \$3.50 per kg, the industry in the study area has a production value of \$42 million. With value adding per kilogram the worth increases to approximately \$16 /kg.

Industry figures put current set up costs at \$50 per tree planted. Macadamia trees take up to five years until first harvest, eight years until a profit is achieved and 11 years until a return on investment is realised. (Overview of Land Use In The Study Area & Constraints; Tintenbar to Ewingsdale Upgrade; Agricultural Focus Group Meeting No.3# - Joanne Walsh). There is substantial initial and ongoing capital investment. Macadamias are native to the area and the study area consistently achieves extremely high growing rates, rating as some of the highest in Australia. This has resulted in substantial increases in land prices. Currently Macadamia farms in the study area are valued at \$43,000/ha and at \$100 plus for each mature tree. (S. Bogg, J Underhill, Macadamia Industries Australia and Cliff James. With 25 years in the industry

Cliff is a specialist in Macadamias, international/national business consultant and ex-President of the Macadamia Society).

The impact of the proposed Pacific Highway upgrade on the Macadamia industry is substantial. Farmers are putting further development on hold pending the Highway route decision and are extremely concerned about the potential loss of investment in trees, which have been planted but are not yet producing.

Stone fruit

Low chill stone fruit are emerging with other new industries such as blueberries and nursery and plant production. There are two mature tree farms in the study area. The annual production of low chill stone fruit ranges from 2,000-2,500 tonnes per annum and gross value of production at the farm gate was estimated to be \$10 million for the study area in the year 2000 (NSW Department of Agriculture 2000) There has been significant further investment since 2000. A viable farm ranges from 2-5 /ha (2-3 /ha being the minimum viable size). Each hectare supports 500-1,000 trees depending on the variety. At \$100/tree (pending on fruit size), the estimated gross income per farm for the study area is \$20,000-25,000 at full production. The estimated value of stone fruit land per ha is \$175,000. (Overview of land Use In The Study Area & Constraints; Tintenbar to Ewingsdale Upgrade; Agricultural Focus Group Meeting No.3# - Joanne Walsh)

Coffee

The study area offers a prime environment for the coffee industry. With its well drained fertile soil, sub-tropical climate and north facing slopes the area is unique in Australia and renowned for the high quality of its coffee. There are significant award winning production and processing holdings owned and operated by leaders and innovators in the industry in the study area. There are seven coffee plantations in the study area. Two of these are the largest plantations in New South Wales and are ranked within the State's top five both in crop quantity and by value of their roast and wholesale product.

Case Study

- Zentveld's coffee plantation on Broken Head Road is NSW's original commercial coffee plantation, with 25,000 of the Department of Primary Industries earliest varieties planted in 1997. Their entrepreneurial efforts have been the backbone of the growth and success of the local coffee industry. From seed to cup, they have initiated and invested in the professional equipment and methodology across the spectrum from seedlings, harvesting and all of the processing stages through to roasting.
- Zentveld's is recognized as an education facility and showcase for international coffee advisors and growers, agricultural schools, Universities and TAFE teachers and students across Australia. The federal RIRDC and NSW and QLD Departments of Primary Industry have had a 17 year history of bringing visitors, conducting varietal, yields and irrigation studies

- and funding research programs based on data and trials on the Zentveld's property.
- Zentveld's import and exporting business (CAPE Australia), exports coffee processing equipment across 21 nations, to the value of \$0.5 million per year. Their locally engineered and custom built processing equipment adds \$100,000 to local manufacturers.
- Zentveld's provide a unique service to local growers, processing and grading local crops to 'market ready' maximum quality, graded green bean. Zentveld's ongoing improvements and investment in processing equipment ensures market leadership and maximum return potential for not only their crop, but the 25 + local growers they process as well. This is a vital in an industry dominated by 3rd world (cheap labour) production practices.
- Zentveld's wholesale coffee roastery purchases beans from over 25 local growers. They pay 4 times the world average for premium quality raw green bean coffee, paying \$200,000 + direct to local growers. Turnover of around \$1million is expected for the 05- 06 financial year for Zentveld's coffee roastery. There are ten people employed on the Zentveld's coffee plantation.
- Zentveld's are Australia's most awarded roastery of Australian coffee in the national coffee competition. With a ready market and solid growth in worldwide demand for premium quality, spray free coffee the future is bright for local coffee production. The microclimate and rainfall, deep red soil, natural springs and gentle sloping land along the Newrybar hinterland has proved to be perfect for producing premium quality coffee. The production is pesticide free and gmo free, a truly sustainable agricultural

crop with price stability, ever increasing market demand and an 11 year history of prices for local crops being 4 times the world average.

There have been discussions with local landowners, who have indicated an interest in changing their land use to coffee production, but are reticent to do so due to the uncertainty created by the proposed Highway upgrade.

If this were the Hunter Valley, one wonders whether the RTA would take away the potential for quality grape production, and the future of the wineries in that area. Our local coffee producers are the *'Tyrell's in the* making' and the prime agricultural land (of State and Regional Significance) within the study area should be recognized as being of core value to our future food bowl and agribusiness success. The RTA's figures put the total area currently under coffee crop at 153 hectares and the Department of Primary Industries figures put crop quantity per hectare at 3300 kilos raw green bean coffee. Currently, Australian roasters are paying \$8.50 /kilogram for green bean. Therefore without value adding, the actual crop value within the study area is worth 153 x 3300 x \$8.50 = \$4,291,650 annually. (Rebecca Zentveld)

Sugar Cane

Sugar cane is one of the region's biggest employers and accounts for \$230 million of regional economic output per annum (Figure for total Northern NSW. The RTA Study area only figures are not available). The land in the extended low lying area of the study area is primarily dedicated to sugar cane farming.

Tourism

Tourism is a rapidly growing industry in the study area. Tourism in the study area primarily comprises quaint bed and breakfast, country style home-stay, up market accommodation and cabin accommodation. These businesses will either be destroyed or significantly affected if the proposed Pacific Highway upgrade proceeds. Tourists are attracted to the area because of its worldwide reputation, its natural beauty, its lifestyle, its proximity to towns such as Byron Bay and Bangalow and its easy access to the beaches. It seems unlikely that tourists will find accommodation overlooking or within close proximity of a major motorway enticing. Other industries like cafes, restaurants and retailers will suffer as a result. Examples include the Macadamia Castle with thousands of visitors per day in holiday periods and the Harvest Café in Newrybar voted best breakfast restaurant in NSW.

Case Study

In November 2004 Tony and Rie Gilding purchased with their life savings two properties in the subject area with the express purpose of turning them into five Eco Tourism cabins. Purchase price was 2.4 million. Between exchange of the property and settlement the area containing the land was newly designated as study area for a Pacific Highway Upgrade.

The Gildings had budgeted capital expenditure on this project in excess of \$1 million dollars and ongoing expenses of at least \$100,000 per annum. The

project has been put on hold. If the highway does pass in front of their property it will destroy their retirement and superannuation plans along with the significant positive impact this project would have had for the area. No compensation would be paid under current legislation.

Home Businesses

It is estimated that 65% of families living in the area operate a business of one kind or another from their home or farm. These businesses are either the families prime income source or supplement other income. Many people moving to the area in the past decade have done so for lifestyle reasons. This trend is especially relevant to those who have settled in the escarpment and plateau areas of the study area. These people have had to put on hold any expansion or new investment in these businesses.

Financial Impact

Of critical importance is recognition of the substantial capital investment in agriculture and horticulture in the study area. Many of these enterprises have been funded by bank loans with farmers servicing borrowings for on average 5 – 10 years before full production is achieved. A large number of the enterprises in the region are yet to reach maximum production and thus these people stand to lose not only their future income but the substantial capital investment they have made They will be left with debt to service and no income. For many self employed farmers these investments also represent

their superannuation, the loss of which has serious cost implications for future governments.

Social Impact

The families in the study area are not able to present social impact statements. Given the small size of holdings, the intensity of production and land use and the high monetary price paid to purchase land in the area the impact of the proposed motorway in social terms is potentially devastating. People stand to lose all that they have worked for and invested in with no means of compensation. In most instances the people affected do not have the time or the means to start over again. What quantifiable value can be placed on human anxiety, fear and despair? What are the long term costs to the community of this damage? The current compensation formula allows only for those whose land is acquired. There is a good case for those who are directly affected to be able to claim compensation.

1.e) The impact of B- doubles on the Pacific Highway

The New England Highway is the gazetted National Highway and freight route. However the Pacific Highway, even though it is a gazetted regional Highway, is now the primary interstate freight route. (Environmental Planning and Assessment Act (1979)). Upon completion of the Chinderah – Yelgun motorway in 2002 the Minister gazetted B-double use on the Pacific Highway

despite the fact that this section represented only a fraction of the area needing to be upgraded. There was no community consultation or discussion with local politicians. Only local governments were advised. The Byron Shire Council rejected the proposition on the basis of a number of serious concerns as to the ability of the existing Pacific Highway to cope with the B-doubles. Despite Byron Shire Council's position the Minister pushed the decision through. (Jan Barham, Byron Shire Mayor)

It is speculated that the RTA were keen to support the shift of heavy freight from the New England Highway to the Pacific Highway to use as evidence to lobby for further Federal funding for the completion of the Pacific Highway. With the 10 year agreement between the State and Federal Governments due for renegotiation in June 2006 it is an interesting allegation.

The shift of B-doubles to the Pacific Highway was also a political move to buy favour and support from the trucking industry.



Cars and trucks don't mix. The Pacific Highway on the North Coast.

It is also interesting to note that there has been no cost analysis with regard to completion of the upgrading of the New England Highway. (Don Page, MP Member for Ballina).

There are very serious safety issues associated with the combination of articulated trucks, B-doubles and passenger vehicles. Given the population density along the eastern seaboard and the projected traffic volumes, to use the same route for interstate transport, large B-doubles and passenger vehicles defies logic.

The enclosed 3 minute DVD which forms part of this presentation shows this conflict in graphic terms.

1.f) The impacts of interstate heavy transport on the Pacific Highway and the mixing of interstate and local transport.

The RTA is planning to build a new highway corridor and create a motorway with exits and entry points approximately 20 kilometres apart. This will create an interstate Pacific Highway where both heavy transports and passenger vehicles share the road and a second Pacific Highway on the existing route which will be used by local traffic, local freight and tourists. The impact of this is clearly evident on the Chinderah-Yelgun section where local traffic accessing Murwillumbah from the south must use the notoriously dangerous Burringbar Range route (site of numerous fatalities).

The creation of an interstate transport route up the eastern seaboard through densely populated rural areas and through land of significant agricultural importance does nothing to meet the needs of the region. Instead it has a serious negative impact on one of the fastest growing regions in Australia.

There are serious concerns about the projected impact of traffic noise on residents within a three kilometre radius of the proposed motorway. The level of traffic noise depends on three factors: 1) the volume of traffic, 2) the speed of traffic and 3) the number of trucks in the traffic flow. A doubling of traffic volume increases the noise level (Leq) by 3dBA. Traffic at 100kpm sounds twice as loud as traffic travelling at 50kph. One single truck at 90kph sounds as loud as 28 cars travelling at the same speed. Heavy trucks are a major

component of traffic noise and a critical determinant of the distance that the noise will travel. This is further exacerbated by undulating terrain and by the use of compression braking. (Bernard Grinberg 'The Loud Price of Progress' – please refer to Appendices). B-doubles and other articulated trucks are not suitable for use through areas of high population density. The density of the eastern seaboard and the Tintenbar to Ewingsdale section in particular is far greater than that along the New England Highway.

Extensive international and national research shows that emissions from motor vehicles have established deleterious health impacts on people. These pollutants cause brain and neurological damage and lead to learning disabilities and lowered IQ levels in children. Air pollutants from emissions include carbon monoxide (CO), nitrogen oxides (Nox), dioxins, particulate matter including polycyclic aromatic hydrocarbons (PAHs) and hydrocarbons including toluene, benzene, xylene, and 1,3-butadiene. Diesel engines are the main causes of emissions and in Australia they contribute to 40% of the oxide pollutants and up to 80% of the particulate emissions.

The specific issues relating to safety, noise and emissions are discussed below in more detailed papers by Ian Duncan, Bernard Grinberg and Dr Robert Lodge.

There are also concerns with the funnelling of traffic into the densely populated Gold Coast residential area. Planners in South East Queensland have identified the Ipswich area as being more suited for

heavy freight access into Brisbane. Surely all these years after Federation, a national approach to the planning of infrastructure development is essential.

Safety

State wide statistics show that heavy vehicles (articulated trucks) are much more likely to be involved in accidents causing fatalities and injury than passenger vehicles. Based on the number / type of vehicles involved in crashes in relation to the number of registered vehicles by type, heavy vehicle fatal accident rates are many times higher than passenger cars and also four times worse with injury crashes.

While the death rate from motor vehicle accidents has declined significantly over the past 20 years, the death rate from articulated truck accidents has shown no improvement in the past 15 years. Research shows that 71 % of 'articulated truck' accidents involve multiple vehicles. Most importantly 59 % of all articulated truck fatal crashes involve multiple vehicles in 100 kph speed zones.

Road safety is a major issue on the Pacific Highway between Hexham and the Queensland border. In 2003 there were 1,111 crashes resulting in 56 fatalities and 720 injured persons. The highway has not got any safer in recent years, in the period 1990 –1994 there was annual fatalities of 44 persons, for 1999 - 2003 the annual average had risen to 48. This would suggest that the

increase in vehicle traffic has overwhelmed the beneficial impact of the highway improvement program to date.

On the Pacific Highway 25 % of all fatal crashes involve heavy vehicles while they represent about 15 % of the traffic count. The RTA *Pacific Highway Safety Review, May 2004* also states that "even when the truck is not recorded as the key vehicle in the crash it may have been a significant contributor to the crash by virtue of its speed". Thus the official statistics probably understate the real impact of heavy vehicles in accidents.

RTA speed surveys on the Pacific Highway have shown "85 % of trucks are speeding in the range 104 to 114 kph with individual vehicles recorded at significantly higher speeds". In addition the survey reported "tailgating and large convoys of vehicles along some parts of the highway" NSW Country Roads Summit 2004 reported that "speeding heavy vehicles were involved in 12 % of casualty accidents, 85 % of which occurred on country roads.

Some authorities contribute the safety problems in road freight vehicles to the competitive environment of the freight haulage industry where operators are working on small margins. A survey of long distance freight drivers in 2001 showed that 68 % of drivers were paid on a piece work basis (trip/km/MT), and 17 % of drivers earned less than the award wage.

Divided highways and freeways are safer than two way undivided roads. On freeways only 0.3 % of crashes involve fatalities and 35 % involve injury, while the respective figures for non-divided roads are 1.6 % and 43 %.

Where large numbers of vehicles on the same road are involved there would appear to be an argument in freeway road design for the maximum road separation between passenger and heavy vehicles. In Europe the fact that heavy vehicles are frequently restricted to special highway lanes and to 90 kph must be noted. (Ian Duncan 'Road Safety and the Pacific Highway' – please refer Appendices)

Noise

In recent years, highway traffic noise - the unpleasant, unwanted sounds generated on our nation's streets and highways - has been of increasing concern to the public. With the demise of the train network both volumes and size of heavy vehicles are growing rapidly. "Sea change" is attracting big increases in passenger traffic to coastal areas. Traffic noise is probably the most serious and pervasive type of noise pollution. Studies have shown that on a daily basis almost 40 per cent of Australia's population is exposed to undesirable levels of traffic noise and a further 10 per cent is exposed to excessive levels (http://www.science.org.au/nova/072/072print.htm) with increasing sleep disturbance. With a lot of pressure from communities there have been some modest responses to the resultant problems from State departments, but virtually none from Commonwealth or Local Government officials. Politicians of most persuasions and bodies like the NRMA have

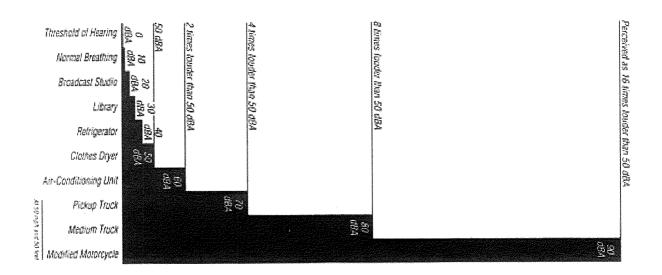
promoted the simplistic line of "just upgrade the roads" without any regard for the noise consequences to local communities. Such piecemeal thinking has put a vast majority of Australia's greatly increasing road freight travelling noisily right next to communities. At the same time, modern acoustical and automobile technologies have been providing better ways to lessen the adverse impacts of highway traffic noise, but few of these have been deployed or mandated by the relevant State or Commonwealth agencies. All of this adds up to major problems on the Northern Pacific Highway.

Sound and Noise

Sound is quantified by measuring equipment, which measures units called decibels (dB). For highway traffic noise, an adjustment, or weighting, of the high- and low-pitched sounds is made to approximate the way that an average person hears sounds. The adjusted sounds are called "A-weighted levels" (dBA). This scale purports to mirror how we hear, and thus de-rates the lower pitched sounds (frequencies). This mathematically diminishes the impact on the measurement of heavy vehicle noise (see below).

The A-weighted decibel scale begins at zero. This represents the faintest sound that can be heard by humans with very good hearing. The loudness of sounds (that is, how loud they seem to humans) varies from person to person, so there is no precise definition of loudness. A difference of 3dBA is just noticeable and represents a doubling of acoustic energy. However, based on many tests of large numbers of people, a sound level of 70dBA is twice as loud to the listener as a level of 60dBA. This is illustrated here, with the noise

emitted by a significant proportion of large trucks being off the end of the scale. (please refer to the section on Compression Brake Noise in 'The Loud Price of Progress' – Bernard Grinberg - in attached Appendices)



Compression Brake Noise

Compression or "Jake" brakes are a braking system used on heavy vehicles (semis) that modifies engine valve operation to use engine compression to slow the vehicle. The name comes from Jacobs Vehicle Systems in the USA (www.jakebrake.com).

The driver controls consist of an on/off switch and, sometimes, a multi-position switch that controls which cylinders the brake is active on. When the compression brake is turned on, it will activate when the driver releases the accelerator. There is also a switch on the clutch pedal that will deactivate the compression brake when the clutch is disengaged Jake brakes often make a loud chattering, thudding or machine gun noise while being used, particularly with faulty or non-functional mufflers, which has led many communities in the

USA to ban them. Australian truck drivers mostly leave the brakes on to save wear of the normal braking system, so you can sometimes hear the nasty noise even on small grades. They are not at all used by European manufacturers, who provide far quieter methods of auxiliary braking.

This noise problem is particularly ugly, as the compression brake noise is impulsive in nature, and having large components at low frequencies (less than 200 Hz) is not readily attenuated by walls, glass or vegetation, not even by ear plugs. This leads to <u>sleep disturbance</u> of residents over a wide region (about 3km, and more with mild wind & clear cold air) surrounding the highway. Background levels of noise in rural and regional areas are quite low, particularly at night, around 30dBA, so such intermittent peak noises are even more noticeable. The steep (up to 9% grade) St. Helena Hill on the Northern Pacific Highway exhibits all of these problems "in spades".

The situation is further exacerbated by Australian trucks having vertical exhaust stacks which, at over four metres, tower over the relatively few barriers. Trucks in Europe have their exhausts under the truck body, thus providing much quieter operation.

Yearly RTA inspections of heavy vehicles apparently also do not include a load test, nor does any testing include the activation of compression brakes. There is a widely held view amongst all State agencies that trucks with compression brakes are noisy and little can be done about it, even though shoddy practices, such as only a single muffler where two separates are

required or the use of a "straight" (i.e. no real) muffler, are well known. There is also apparently a view at the RTA that older vehicles with "Jake" brakes are inherently noisy and that they are "allowed to be under the standards". This is contrary to much advice that we have received, including that publicly available from the Jacobs Brake Company which states clearly that a top quality muffler system makes up to 18 to 21dBA difference in any vehicle. Sound levels of 130dBA have been measured on trucks with no functional muffler – that is well off the end of the scale above and is comparable to a jet engine at 20m!

NSW Noise standards are conveniently fairly vague on what constitutes too many of such peak noise events, so effectively this is not taken into account when building roads.

The standards are defined in the EPA Environmental Criteria for Road Traffic Noise (ECRTN) http://www.environment.nsw.gov.au/resources/roadnoise.pdf and their application by the RTA is described in the in the Environmental Noise Management Manual (ENMM)

http://www.rta.nsw.gov.au/environment/downloads/environmental_noise_man agement_manual_v1_0.pdf).

Land Use Control

When new highways are built care should be taken to distance them from communities. Outside of the metropolitan areas there is no reason why the minimum distance of a major road to any community cluster should be less

than 5km (as was recommended by the Northern Pacific Highway Noise Task Force and accepted by the NSW Government). In practice, by focusing on band-aid, piece meal "upgrades" such as much of the Pacific Highway are being built far closer than that. (Bernard Grinberg, 'The Loud Price of Progress' – please refer Appendices)

3. Related Matters

Newrybar Public School

The Newrybar Public School has provided an important centre of focus for the community over the past 115 years. The school was opened on the 20th January 1890. It was built on two acres of land donated by William Hayter on the corner of Old Byron Bay Road and Broken Head Road. The school was moved to its current location during the Christmas holiday period of 1900. It was moved to provide better access to children in the Newrybar village and surrounding properties.

ARUP considers the School to be a 'no-go' area and an argument in favour of not upgrading the current corridor. The Newyrbar Public School P & C committee has recently conducted a parent survey and 80% of parents favour the school being moved. If the proposed new corridor is extended further east then many of the school's families will move from the area and the school may no longer be viable.

Ecological Impact

Of related economic significance are the few remaining fauna corridors. These provide breeding grounds for brush turkeys, bandicoots, wallabies, tortoises, wedge tailed eagles, echidnas, frog mouth owls and a whole range of birds and animals. It is a well established fact among the scientific community that wildlife corridors are critical to population survival and the maintenance of a viable gene pool. Isolated pockets of individual animals soon become extinct. These wildlife corridors cannot be further diminished without further economic and visual devaluation of the area.

The RTA studies have ignored extensive environmental assessments and therefore lack credibility. For example the constraints identified by ARUP focus on fish species in the waterways. A true ecological assessment of waterway health always includes a study of macro-invertebrates.

The study area contains sensitive environmental land including the wetlands in the Newrybar swamp and corridors along the escarpment. These areas have been identified in the Byron Shire Council's Biodiversity Strategy 2004. The construction of a major freight route through sensitive environments flies in the face of one of the stated objectives (S5a) of the Environmental Planning and Assessment Act of 1979 which purports to encourage the 'protection of the environment, including the protection and conservation of native plants and animals, including threatened species, populations and ecological communities and their habitats.'

Inaccuracies in the ARUP data

The constraints maps released by ARUP contain a number of errors and many sections lack sufficient information for the basis of informed decision making. For example the following issues are of concern.

- The scenic escarpment is limited to a short section of the actual escarpment and fails to include a significant section along Piccadilly Hill Road and Coopers Shoot.
- The aboriginal cultural heritage information is almost non existent. It is understood however that there have been delays in seeking permission from the relevant elders.
- There is a focus on the water catchment region of Emigrant Creek but no such focus on the catchment area of Bryon Creek, which feeds into the Wilson River and services Lismore.
- That they have failed to demonstrate an understanding of the complex issues in this particular study area.

Concerns about the consultation process

It is of concern to residents in the study area that members of the CLG report poor planning around meetings, lack of due notice and sudden changes to meeting schedules. They also report that there will only be three weeks for the community to respond in November when the preferred three routes are identified. In addition there is considerable community resentment around the RTA requesting a code of silence around the current route maps. The

residents see this as a violation of the democratic process, a lack of transparency, as unfair on members of the CLG, as creating a culture of subterfuge, gossip and misinformation and an insult to the intelligence of the community.

Just Terms Legislation

The historical evidence shows that people whose land is resumed by the RTA have to wait until the Minister signs off on the route. This usually occurs just prior to construction. The impact of this is serious. Not only are residents facing serious financial losses but they must also wait for 10 - 15 years to be compensated and in the meantime their land remains blighted.

Conclusion

Despite being a difficult concept to define there are certain assumptions upon which economic viability is based. Working with the resources available and within the time restraints this paper has sought to cover the economic impact that the Pacific Highway upgrade with have on the study area.

Of foremost concern is the loss of prime agricultural land, the subsequent loss of viable holdings as the land becomes further fragmented, the loss of income, the loss of future income, the loss of return on current investment, the inability to service debt and overall impact on the community and wider service area.

Farmers in the study area have put on hold any expansion of plantings, farm improvements, or on site processing equipment at substantial cost.

As this is the second study in this area of an appropriate route for the highway in the last 10 years some are sceptical that even when the preferred route is named there is a guarantee that it will be built. This view is further reinforced by the fact that final routes have been determined in adjacent areas for some years now and yet construction has not commenced. The net effect is uncertainty and it is common knowledge that uncertainty is the surest way to kill economic growth.

The area is also highly prized for its aesthetic and lifestyle features. There are established brand names developed within the study area, which bring national and international revenue into the region. This is an agricultural area of intense production with considerable value adding. The contribution this area makes to the region and to NSW and Queensland should not be under estimated.

The investment in transport infrastructure is of critical importance to the country and costs billions of tax payer's dollars. The long-term impacts are such that careful strategic planning is essential. Planners need to have a comprehensive and visionary approach to decision making. The fact that no comparative cost analysis of the upgrading of the New England Highway (gazetted National Highway and freight route) has been undertaken means that the process is flawed and one can have no faith that the upgrading of the

Pacific Highway to service B-doubles and other long haul freight trucks is a

considered decision.

In the meantime the residents of the Far North coast are paying the price of

the Governments lack of planning and lack of a costed solution. The impact

on their lives is not to be underestimated.

In conclusion we recommend a holistic solution which incorporates ALL

of the following points; they are not to be taken separately.

Interstate trucks and B-doubles in particular, be immediately

moved back to the New England Highway.

An appropriate safety upgrade of the existing highway as a

regional and tourist road be commenced as a matter of urgency.

A suitable motorway or tollway be constructed at least 5km away

from local communities for interstate freight transport.

Alternative freight transport infrastructure is developed.

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