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Dear Mr Burford

Northern Pacific Highway Noise Taskforce Report

Thank you for your contribution throughout the Taskforce process, and in particular for your comments and contributions to the development of the Taskforce Report. A copy of the Taskforce Report is enclosed for your information. The Report along with a copy of all submissions received on the previous draft has been presented to the Minister for Roads. Although we have tried to incorporate as many of your comments as possible, using your words, some have not been included. The table on following page is provided as a response to your comments outlining where your comments or suggested amendments have been incorporated and a brief explanation of why some of your comments/contributions have not been used.

The Taskforce process is now complete however the RTA is committed to continuing dialogue with the various communities represented on the Taskforce, either through specific consultation processes established with local communities throughout the current or proposed noise assessments, or through the project development processes for new or proposed highway upgrade projects.



Comments	Response
<p>Exec summary shows no recognition of the impact of the highway noise on the broader Tyagarah community. Mitigation steps in short and long term strategies as negligent by the RTA and clearly a breach of due process.</p>	<p>The report references Tyagarah in a number of places specifically in the short and long term strategies, where the RTA has committed to a review of the Tandy's Lane Post Construction Noise Report and is prepared to consider additional noise mitigation measures in the Tyagarah area.</p> <p>In addition the Pacific Highway Program Manager has been to visit Tyagarah residents recently to personally discuss additional noise mitigation and consultation will be ongoing.</p>
<p>RTA chosen to impose the noise costs on residents to enhance the contractor's profits. Lower truck speeds to 80kph and the policing and prosecution of noise standards as short terms strategies for the Tyagarah community.</p>	<p>Refer above regarding additional noise mitigation etc. Truck speeds and enforcement are addressed in the Report.</p> <p>Lowering the general speed limit for trucks is likely to increase braking noise as they use brakes to stay under the speed limit now even on relatively flat grades, although it is acknowledged that a lower speed will reduce tyre noise. However speed limits are determined with respect to safety criteria primarily, although noise can be a contributing factor it is not the sole determinant of speed limits.</p>
<p>Recommend that all trucks travelling on the Pacific Highway, both travelling north and south between the Mullumbimby interchange and the Byron interchange, be required to lower their driving speed to 80 km per hour along with speed cameras to support the compliance to that speed</p>	<p>Refer comments above.</p>

Yours sincerely



For: Jay Stricker
Chair of Northern Pacific Highway Noise Taskforce

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**NORTHERN PACIFIC HIGHWAY NOISE
TASKFORCE REPORT**

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EXECUTIVE SUMMARY

Increasing traffic volumes, and in particular the increasing freight task within New South Wales, has had an impact on the existing road infrastructure and on the communities that live along the network. To cater for this increase in demand while maintaining the network's safety and efficiency has led to a number of significant upgrade programs. One such program has been the Pacific Highway Upgrade Program, which aims to improve safety, reduce travel time and freight transport costs.

The Upgrade Program along the northern Pacific Highway has led to increased heavy vehicle volumes. This in turn has resulted in exposure to higher levels of heavy vehicle noise particularly at night, including engine brake noise than previously experienced. This has caused many complaints, with sleep disturbance the major issue.

In response to this issue the Minister for Roads, in February this year, announced the establishment of the Northern Pacific Highway Noise Taskforce. The objectives of the Taskforce are to:

- Increase understanding of the nature of local concerns
- Identify potential short and long term strategies to address issues of concern
- Identify State and local government agency roles and responsibilities in addressing issues of concern.
- Report to Minister on key findings and recommendations, including actions for the relevant State and local government agencies.

The RTA's General Manager, Environment chaired the Taskforce with membership comprising representatives from five local councils (Tweed, Byron, Ballina, Pristine Waters and Coffs Harbour), the Environment Protection Authority (EPA) a truck industry representative, the RTA, and the following local communities:

- Tyagarah Progress Association
- Ewingsdale Progress Association
- Coffs Harbour
- Sapphire
- Ocean Shores Community Association
- Sleepy Hollow
- Knockrow/Newrybar Association

The Taskforce held four meetings between March and June 2003 and representatives from the EPA, the National Road Transport Commission (NRTC) and the RTA gave presentations on relevant topics. The Taskforce has been significantly involved in the drafting of this report.

The short and long term strategies for each area identified through the Taskforce are outlined in the table below. Short term means within the next 3 years and long term implies a longer timeframe of approximately 5 years and above.

Location (north to south)	Short term strategy	Long term strategy
Tweed Heads	<ul style="list-style-type: none"> Noise monitoring and investigation of noise walls in consultation with the community. 	
Banora Point	<ul style="list-style-type: none"> Planning will commence in the 2003/04 financial year for the Banora Point Upgrade 	<ul style="list-style-type: none"> Construction of the Banora Point Upgrade
Yeilgun to Chinderah	<ul style="list-style-type: none"> Finalise Post Construction Noise Assessment Architectural treatment of houses (in progress) Investigate potential use of noise walls on approach to and around heavy vehicle rest area. 	<ul style="list-style-type: none"> Review siting of heavy vehicle rest area
Brunswick to Yeilgun (Ocean Shores)	<ul style="list-style-type: none"> Enforcement strategy for safety Project proposal with Minister for Infrastructure and Planning for approval. 	<ul style="list-style-type: none"> Further consultation with residents as part of project implementation on treatment options during detailed design.
Tandy's Lane	<ul style="list-style-type: none"> Finalise acoustic treatment of homes (including solar boosted ventilation system) Review acoustic assessment 	
Tyagarah	<ul style="list-style-type: none"> Review acoustic assessments, and investigate additional mitigation measures including acoustic treatments of homes. 	
Ewingsdale	<ul style="list-style-type: none"> Currently re-doing post construction noise assessment and re-assessing noise mitigation requirements, including extensions of existing noise walls. Consider brief trial of 80km/hr speed limit for 	<ul style="list-style-type: none"> Review St Helena Hill alignment as part of Bangalow to St Helena project (Ewingsdale Stage 2)

Location (north to south)	Short term strategy	Long term strategy
Newrybar/Knockrow/Tintenbar	<p>trucks only on St Helena Hill, acknowledging that it may increase noise due to increased engine braking.</p> <ul style="list-style-type: none"> Noise monitoring and consultation with community in progress. Investigate design and effectiveness of noise wall to protect Newrybar Village and school, as requested by local community.. 	
Sunnycrest Lane Rest Area	<ul style="list-style-type: none"> Limit usage to light vehicles only and investigate cost effectiveness of a noise wall 	<ul style="list-style-type: none"> Review location and facilities as part of the Pacific Highway Rest Area strategy.
Ballina (north)	<ul style="list-style-type: none"> Review speed limit/placement of signs 	<ul style="list-style-type: none"> Bypass
Ballina (central)	<ul style="list-style-type: none"> Work with local traffic committee on short-term traffic management options. 	<ul style="list-style-type: none"> Bypass
Ballina (south) Wardell (and similar small villages between Ballina and Grafton)	<ul style="list-style-type: none"> Speed limit/placement of signs Investigate advisory signs for engine brake noise. Further investigation of mechanical solutions for reducing noise from older bridge joints. Investigate measures to reduce noise from vehicle rest area. 	<ul style="list-style-type: none"> Bypass
Corindi Beach	<ul style="list-style-type: none"> Re-consider lower noise wearing surface as part of next pavement rehabilitation 	
Woolgoolga (Sapphire to Woolgoolga project)	<ul style="list-style-type: none"> Noise considered as significant factor in planning and design of Sapphire to Woolgoolga 	<ul style="list-style-type: none"> Mitigation measures implemented as part of project construction.

Location (north to south)	Short term strategy	Long term strategy
Sapphire/Korora/Kororo	<ul style="list-style-type: none"> • project. • Investigate the effectiveness of the recent reduction in the speed limit on southern approach. • Re-surfacing with quieter pavement in each area in the 2003/04 financial year. • Noise assessments in progress (in consultation with residents). • Coffs Harbour Planning Strategy in progress • Review previous noise assessments (prepared in early 90s). 	<ul style="list-style-type: none"> • On-going planning and EIS investigation for this area.
Coffs Harbour		
Lyons to England Road		
All locations		<ul style="list-style-type: none"> • NRTC, EPA and RTA to develop effective regulation of engine brakes • Driver education regarding inappropriate use of engine brakes • Ongoing enforcement campaign of speed limits and road rules. • Noise considered as a significant factor in strategic landuse planning.

In response to the issues considered by the Taskforce the following recommendations are made:

1. The EPA review the NSW Environmental Criteria for Road Traffic Noise (ECRTN) specifically considering:
 - a) the use of an additional measurement scale in addition to an A-weighted scale, for the measurement of low frequency noise and the noise characteristic of engine brakes;
 - b) international and Australian research on the assessment of maximum noise and in particular its effects on sleep and health;
 - c) international best practice in setting appropriate criteria for day and night-time noise levels, including the indoor levels suggested in the WHO Guidelines for Community Noise; and
 - d) the effects of weather on the level of road traffic noise received at distances greater than 200m from the road.
2. The RTA to incorporate the outcomes of the above review into its Environmental Noise Management Manual (ENMM).
3. With respect to the existing highway, ie areas that have not been upgraded or are not planned to be upgraded for several years, the RTA should:
 - work with the local communities in areas where future upgrade work is several years away, to:
 - a. undertake noise monitoring to better understand the level of impact of the Pacific Highway on local noise sensitive receivers
 - b. determine what cost effective noise mitigation measures can be implemented; and
 - c. in consultation with the local communities, implement appropriate measures in accordance with the NSW ECRTN and the RTA's ENMM.
 - establish a budget and intervention level for the noise abatement program along the Pacific Highway and the Northern Region;
 - work with local Councils to consider other traffic management measures to reduce noise and improve safety in urban areas and rural access points; and
 - work with local Councils and Department of Infrastructure, Planning and Natural Resources to promote integrated transport and land use planning.
4. The RTA, the NSW Police, NRTC and Road Freight Industry to develop a joint education campaign targeting inappropriate use of engine brakes and other driver behaviour issues discussed in this report
5. The RTA, and the NSW Police to undertake as a matter of urgency a joint enforcement campaign for speed and other vehicle standards.

6. The RTA, NRTC and the Police, in consultation with the truck industry, to progress the development of suitable intelligent transport systems and on-board technologies to assist in the regulation of noise from heavy vehicles.
7. The RTA to work with industry and the NRTC to improve compliance with speed limiting devices.
8. The EPA and RTA to investigate how best to regulate engine brake noise through a regulatory framework for implementation under the Protection of the Environment Operations Act (POEO Act) or Road Transport (Safety and Traffic Management) Act 1999 or other alternatives. The current noise assessment being developed by the NRTC provides a platform for this work.
9. The RTA in consultation with the Police develop a policy for considering noise in determining speed limits and in the placement of speed limit signs, and speed camera advisory signs along the highway whilst recognising that road safety is a primary concern.
10. Investigate alternative freight transport options and potential incentives, including incentives to re-distribute freight movement between Pacific Highway, and the New England Highway.
11. Traffic data, post Yelgun to Chinderah, should be gathered by the RTA and analysed looking at the movement of freight between Sydney and Brisbane, in particular the relative distribution of the freight task between the Pacific Highway and the New England Highway.
12. The RTA to review the Bangalow to St Helena (Ewingsdale Stage 2) EIS in light of concern about road traffic noise. [Note the RTA is currently undertaking further monitoring of noise levels in the Ewingsdale area following the opening of Yelgun to Chinderah.]
13. The RTA to consider the following changes to project development phases, as outlined below:
 - a) For road traffic noise sensitive areas, ensure highway alignments and corridors are modified/expanded to maximise noise protection to residences by considering the following suggestions:
 - i. "provision of set backs in conjunction with other mitigation measures such as noise mounds, where possible;
 - ii. level and low vertical alignment of major roads relative to surrounding residential areas, including consideration of tunnelling where feasible;
 - iii. locating new highway segments carrying heavy vehicles at least 5km from any community in preference to widening existing segment where possible, and where not reasonable, a low noise wearing surface be used; and
 - iv. providing solid barriers to prevent line of sight view of heavy vehicles, at least 25% higher than truck exhausts for

dwellings within 500m of the highway, or height to be determined after acoustic assessment taking into account local topography and climate." }

- b) Provide more detailed information as part of project EIS/REF, such as:
- confirmation, where possible, of noise outcomes in relation to surface type;
 - outline mitigation measures (areas of buffer noise mounds, noise walls etc) in more detail;
 - further consultation with communities and/or affected noise sensitive receivers if there have been changes in design and details of mitigation works (eg barriers , paving etc);
 - identify noise mitigation works that can be built in advance of or earlier than construction; and
 - siting of heavy vehicle rest areas.
- c) At the detailed design stage:
- undertake more detailed and complete noise designs (eg architectural treatments to noise affected residences, and refine height of noise walls)
 - bring forward works to the detailed design phase which can be built in advance of main construction contracts
 - more information to residents on specific treatment types, processes and what is proposed,
 - implement strategies relating to pavement selection and maintenance so pavement can be selected taking account of noise objectives as well as safety and cost considerations
 - further consultation with communities and/or affected noise sensitive receivers if there have been changes in design and details of mitigation works (eg barriers , paving etc).
- d) At the construction phase:
- advance noise mitigation treatment works where possible; and
 - no changes to detail design of mitigation measures without further community consultation.
- e) At the post-construction phase:
- establish guidelines for resolution of disputes about:
 - i. application of noise policies;
 - ii. pre- and post-construction noise monitoring and modelling; and
 - iii. further reviews of results
14. The RTA to establish a process for on-going consultation with noise affected communities along the Pacific Highway.

Chapter 4 of this report provides a summary of the issues raised by the Taskforce members and from submissions and correspondence received. Key issues identified include:

- There has been an increase in the overall traffic volume with an associated increase in road traffic noise levels. The taskforce would like it to be recognised that people living in rural, non-metropolitan centres, have a special problem with road traffic noise because of the relatively low background noise from non-road sources.
- Members of the Taskforce raised a concern that the current NSW Criteria for Road Traffic Noise (ECRTN) and the RTA's Environmental Noise Management Manual (ENMM) have not provided a level of protection against the increase in road traffic noise that they consider satisfactory.
- There has been an increase in heavy vehicle volumes, particularly since the opening of the Yelgun to Chinderah project. There is currently limited traffic data available to draw reliable conclusions about heavy vehicle travel patterns and in particular probable shifts in heavy vehicle traffic travelling interstate, particularly from the New England Highway on to the Pacific Highway. The RTA is about to begin a detailed traffic analysis, post Yelgun to Chinderah Upgrade, of traffic volumes and patterns including the extent of transfer from the New England Highway to the Pacific Highway, and taking into account seasonal fluctuations.
- The overall increase in traffic and the movement of freight at night along the Pacific Highway exacerbates the annoyance caused by the use of noisy engine brakes and leads to sleep disturbance. As discussed in Chapter 3 it is believed that individual high noise events (ie events of a short duration generating high noise levels which are significantly higher than the background or ambient noise levels) such as noise from compression braking, can interfere with sleep patterns and cause sleep disturbance.
- The speed of traffic, particularly heavy vehicles along the Pacific Highway, on some rural residential areas is a contributing factor in the increasing road traffic noise along the Pacific Highway. RTA speed surveys show that the 85 percentile of trucks are speeding in the range 104kph to 114kph, with a number of individual vehicles being recorded at significantly higher speeds. In addition tailgating and large convoys of heavy vehicles have also been reported along some parts of the Pacific Highway and running red lights in towns such as Coffs Harbour is not uncommon. The communities along the Pacific Highway in correspondence and submissions received by the RTA have requested increased enforcement of speed and vehicle standards.
- While determination of appropriate speed limits is primarily based on safety considerations such as the design speed of the road, speed is also a factor in the level of noise generated from a road. A significant

proportion of heavy vehicles are reportedly using their engine brakes to decelerate as they enter an urban speed limit zone or approach a speed camera area. The location of speed limit signs, speed cameras and speed camera advisory signs can therefore influence the road traffic noise experienced.

- The location of truck rest areas near noise sensitive receivers has been identified as a contributing factor to increasing road traffic noise along the Pacific Highway.
- At the route selection phase of project development a large number of variables, including road traffic noise are balanced up, in consultation with affected communities, to determine a preferred option. Community members of the Taskforce have raised concerns that noise has not been assigned an appropriate weighting through this process and the result is that noise is under-valued relative to other factors in the decision-making process.
- The type and condition of the pavement in high speed areas influences the level of noise experienced at adjacent receivers. The condition of the pavement "wearing surface" varies along the Pacific Highway. It has been suggested "low noise surfaces should be chosen where roads within 5 km of housing" carry high traffic volumes and/or high percentages of heavy vehicles"
- The full spectrum of environmental and social costs (eg accidents and congestion) should be considered in the economic analysis of various routes at the route selection phase. Members of the Taskforce have recommended that the RTA in its project development processes place more emphasis on noise "costs" or externalities. In addition, some members of the Taskforce have expressed concerns regarding the impact of road traffic noise on the value of properties situated near the Pacific Highway and have suggested that this economic impact needs to be considered in the route selection phase of a project and included in an EIS for a project.
- The freight task along the Pacific Highway varies from 6.7 to 8.3 million tonnes per annum, depending upon location, with about 5 million tonnes moving between Sydney and Brisbane. Modal shift from road to rail would be influenced by rail's ability to compete with roads in terms of a number of factors such as travel time, price and accessibility.
- The issue of alternative freight transport is linked to a broader issue of sustainable transport development, discussed below. A key driver for promoting a greater mode share between road and rail is the objective of providing a transport system that is sustainable in social, environmental and economic terms.

- The siting of noise sensitive receivers adjacent to heavily trafficked highways such as the Pacific Highway is a significant issue in terms of exposure to road traffic noise. Land use planning can help provide long-term cost effective benefits and help guard against high road traffic noise exposure.