

Appendix G

RTA fact sheets

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Completing the upgrade of the Pacific Highway

Community update

OCTOBER 2005







The identification of all remaining route options to upgrade the Pacific Highway between the F3 Freeway and Tweed Heads is a key step in moves to complete the upgrade of the highway.

With the \$2.2 billion Pacific Highway Upgrade Program in place since 1996 almost 230 kilometres of the highway are now double-lane divided road. A further 225 kilometres of new highway have been approved for construction or have had a preferred upgrade route identified.

Five projects have been announced in October 2005:

- F3 Freeway to Raymond Terrace
- Oxley Highway to Kempsey
- Woolgoolga to Wells Crossing
- Wells Crossing to Iluka Road
- Tintenbar to Ewingsdale

This is the final group of five projects which are proceeding to the route selection phase in October 2005. These five projects, along with the sections Macksville to Urunga and Woodburn to Ballina will provide preferred routes for the final 230 kilometres of the highway. This will provide planning certainty for local communities and pave the way for a construction program to complete the upgrade of the Pacific Highway.

Another three projects

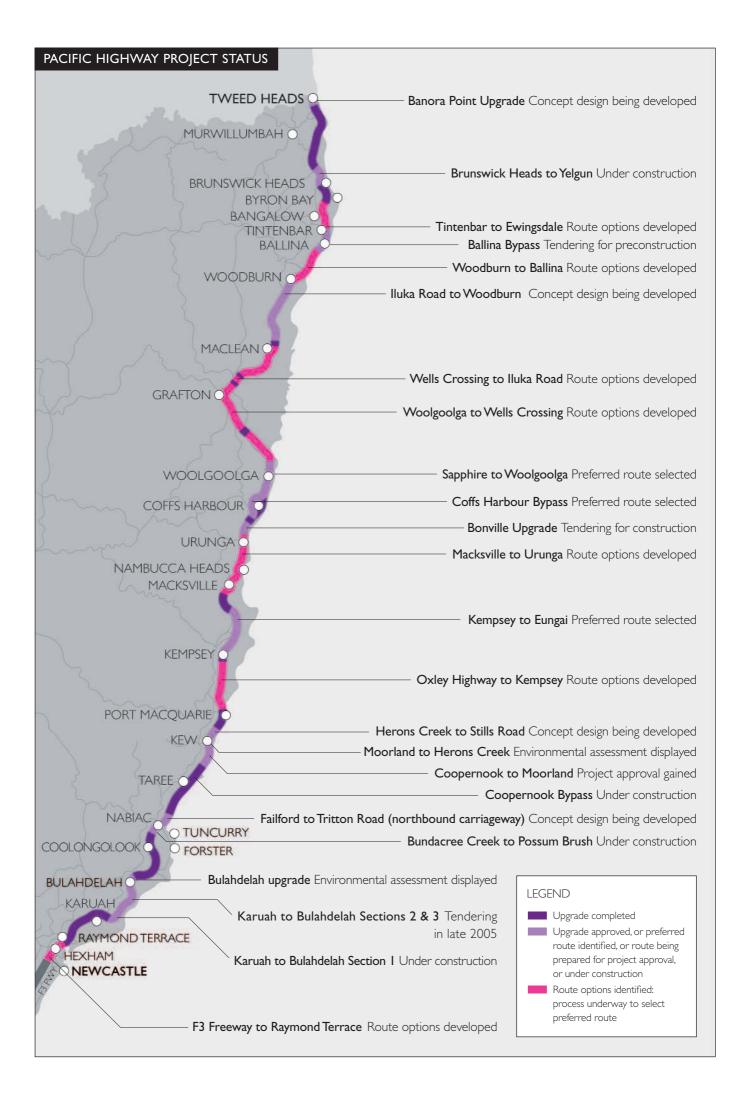
- Iluka Road to Woodburn
- Failford Road to Tritton Road
- Herons Creek to Stills Road

are being prepared for project approval. The expansion of the existing highway to dual carriageway facility has been discussed with the adjacent communities.

The Pacific Highway is a road of national importance. Its upgrading is funded by State and Federal governments.

For the 10 years to June 2006 the NSW Government will have contributed \$1.66 billion and the Federal Government will have contributed \$660 million. For the next three years the Federal Government will match the State Government's contribution of \$160 million/year.

As the Pacific Highway forms part of a national network the Federal Government should increase its contribution to be in line with its funding of other roads. Under Auslink, other highways on the national network are receiving 80% funding from the Federal Government.



To complete a high standard highway upgrade by 2016 at least \$8 billion is required. The Federal Government needs to increase its annual contribution by \$480 million to meet the goal of 2016 and ensure that the Pacific Highway is funded on the same basis as other highways.

Beyond 2006

The RTA is planning for the long term by providing a high standard road, described as a motorway. A key feature involves being able to separate local traffic from through or long distance traffic. This means roads that provide a lower speed alternative are located alongside the motorway that is designed for a speed of 110km/hr. Local traffic can get onto the motorway at regular grade separated interchanges.

Steps to upgrade the highway

Upgrading a major highway is a complex process involving many steps, as summarised below:

- Project planning.
- Identifying route options.
- Selecting a preferred route.
- Preparing a concept design.
- Conducting an environmental assessment.
- Gaining approval for the project.
- Going to tender for construction.
- Constructing the upgrade.

Project planning

A wide variety of factors have to be considered before routes can be identified and selected. Some questions the RTA must consider include:

- What is the best available route for an upgrade?
- What are the major constraints?
- Can potential impacts be managed?
- How will the community benefit?
- What will represent the best value for money?
- What will achieve the best overall outcome?

Identifying route options

The Pacific Highway means different things to different people. For businesses and the wider community, the highway is a major tourist and transport route. For highway communities, it can be their local road. Some people use the highway every day, others only occasionally. In order to achieve the best outcome for the whole community, a range of environmental, transport, engineering, land use and social issues are thoroughly investigated to identify route options that address both the needs of the community and future transport requirements. However, often there is no perfect solution. The challenge is to find a solution that best meets highway transport objectives, while addressing impacts on the community and the environment.

Community involvement is an important part of the process. The community provides input during the development of route options and the process of refining the preferred option.

Route options announced – comments invited

On 21 October 2005, the Minister for Roads, Mr Joe Tripodi, announced route options for the following sections of the Pacific Highway were available for community comment.

- F3 Freeway to Raymond Terrace
- Oxley Highway to Kempsey
- Woolgoolga to Wells Crossing
- Wells Crossing to Iluka Road
- Tintenbar to Ewingsdale

The route options are on display until Friday 18 November 2005. For further information call the Pacific Highway information line on 1800 653 092 or visit www.rta.nsw.gov.au/pacific.



Concept design

Once a preferred route has been selected, the design of that route is further developed. This involves conducting more detailed site investigations to ensure any site constraints are taken into consideration.

Environmental assessment and approval

The RTA is required under the *Environmental Planning and* Assessment Act to undertake an environmental assessment of all projects to upgrade the Pacific Highway.

The Act has been amended (August 2005) and the new steps involved in the environmental assessment process for major infrastructure projects are summarised below:

- The RTA lodges an application for project approval with the Department of Planning and advertises the lodgement of this application.
- The Director-General of the Department of Planning provides a list of requirements for the environmental assessment studies, and the RTA prepares an assessment.
- The RTA submits a report to the Department of Planning who place the documents on public exhibition for 30 days. Submissions are invited.
- The Director-General asks the RTA to respond to the issues raised by the community and/or provide a preferred project report.
- The Department of Planning provides an assessment report for consideration by the Minister for Planning. The report is placed on the Department of Planning's website.

After considering the assessment report, the Minister for Planning decides whether to grant approval to the project.

Construction projects

Five major construction projects are currently underway or about to commence including Karuah to Bulahdelah Section I, Bundacree Creek to Possum Brush, the Coopernook Bypass, Brunswick Heads to Yelgun and Bonville.

Opportunities for community input

There are many opportunities for community input during the planning and development phases of the upgrade projects. Community discussions have been held through a variety of meetings: groups and landowner discussions for various upgrade projects. Displays are held at key stages to seek community input on:

- Route options.
- The preferred option.
- The environmental assessment.

For more information on how you can get involved please call the Pacific Highway Information Line on 1800 653 092.

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For further information

For more information on the Pacific Highway Upgrading Program please call or visit:



1800 653 092 (freecall)



www.rta.nsw.gov.au

How is noise addressed?

Upgrading the Pacific Highway



The Roads and Traffic Authority (RTA) is committed to minimising the potential effects of highway traffic noise on the community through the use of noise reduction or mitigation measures. This fact sheet explains how noise impact is assessed and how it can be reduced.

What is road noise?

Noise consists of pressure fluctuations in the air, which are detected by the human ear. The ear is sensitive enough to detect these fluctuations over a considerable range of both intensity and frequency.

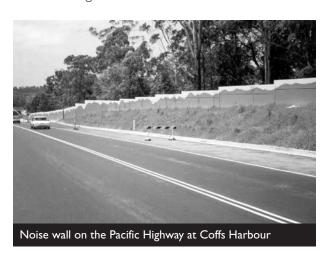
Unlike industrial noise in the workplace, traffic noise is rarely loud enough to cause hearing loss. Its main effects are annoyance. Noise can also cause fatigue through sleep disturbance.

The 'loudness' of the noise is determined by the energy intensity of the air pressure fluctuations and the resulting sound pressure level is measured in decibels (see Figure I below). The human ear detects each IO decibel (dB) increase in noise levels as equal to a perceived doubling in loudness. A doubling of traffic volume will result in an increase in noise level of only 3 decibels.

S	OUND PRESSU	RE DB
THRESHOLD OF PAIN	200,000,000	140 Iget engine, 25m away
		130
EXTREME	20,000,000	120 Iet taking off, 100m away
		IIO Pop group
VERY NOISY	2,000,000	100
		90 Pneumatic drill, 7m away Heavy truck at 40km, 7m away
NOISY	200,000	80
		Average street traffic at 40km, 7m away
MODERATE	20,000	60 Business office
		50
QUIET	20,000	40 Living room
		30 Library
ALMOST SILENT	200	20 Bedroom
		10
THRESHOLD OF HEARING	20	0

Figure 1. Unweighted sound levels and typical sources

Similarly, doubling the distance between a residence and a road will result in a 3 decibel reduction in noise level due to the way in which traffic noise travels over distance. Further reductions in noise levels can be due to the effects of soft ground, atmospheric absorptions and screening features, such as walls.



How is road noise regulated?

In New South Wales, the guidelines for road traffic noise are documented in the *Environmental Criteria for Road Traffic Noise*) (NSW Environment Protection Authority, 1999). This document is available online at: www.environment.nsw.gov.au/resources/roadnoise.pdf. The RTA's *Environmental Noise Management Manual* also provides guidance on assessing and managing noise and vibration from road construction and operation. The RTA's *Environmental Noise Management Manual* is available online at: www.rta.nsw.gov.au/environment/noise/noise_management_manual.html.

Construction noise from government authorities is regulated by the NSW Department of Environment and Conservation. The various criteria for construction noise and vibration impacts are detailed in the *Environmental Noise Control Manual* (NSW EPA 1994). This manual is currently being reviewed by the Department of Environment and Conservation.

How is road noise assessed?

Noise effects and potential noise mitigation strategies and designs need to be identified and developed throughout the road development process, from the initial planning stages through to construction and project opening. This ensures the development of noise impact control measures as an integrated part of the overall road design process.

Step 1: Measure the existing noise environment The first step is to measure the existing noise environment.

With most highway upgrade projects there are too many potential noise receivers to place noise monitors

at every location. For this reason, noise levels are determined by measuring at several representative locations and then estimating for other areas. Noise levels are calculated in accordance with the Australian Standards (AS 2702 Acoustic Methods of Measurement of Road Traffic Noise) and requirements of the Department of Environment and Conservation. Qualified and experienced acoustic practitioners undertake all noise assessments for the RTA.

Step 2: Consider the noise generated by the new road and add this to background noise

When assessing road traffic noise, the following is considered: volume and percentage of heavy and light vehicles for both day and night periods; vehicle speeds; road pavement surface type; topographic features; receivers/source distance and heights; roadside topographic barriers; reflections from buildings or roadside barriers and contributions of noise from other traffic sources likely to influence the overall noise environment.

	Criteria			
Туре	Day (7am- 10pm) dB(A)	Night (10pm- 7am) dB(A)	Where criteria are already exceeded	
New freeway or arterial road corridor	LAeq (15hr) 55	LAeq (9hr) 50	The new road should be designed so as not to increase existing noise levels by more than 0.5dB. Where feasible and reasonable, noise levels from existing roads should be reduced to meet the noise criteria.	
Redevel- opment of existing freeway or arterial road	LAeq (15hr) 60	LAeq (9hr) 55	In all cases, the redevelopment should be designed so as not to increase existing noise levels by more than 2dB. Where feasible and reasonable, noise levels should be reduced to meet the noise criteria.	

Figure 2. Environmental criteria for road traffic noise.

Step 3: Consider the new noise level against guidelines

The Department of Environment and Conservation sets the road traffic noise level goals for the RTA (Figure 2). The RTA must try to achieve these goals 10 years after opening a project to traffic.

Step 4: Installing measures to reduce noise volumes

Potential noise effects are considered early in the route options selection process for highway upgrade projects. Potential measures to reduce noise examined at this stage include:

- Locating routes away from noise sensitive areas (where feasible). This is difficult to achieve in all cases.
- Using existing hills and ridges to help shield from noise impacts.
- Minimising road slope (grades) that need more energy from vehicles. Also providing a buffer area, or 'setback' on either side of the road. These areas are often where noise mounds are located.

The most suitable types and locations for noise reducing measures such as noise walls/mounds, low noise pavement and acoustic treatments are examined at the detailed design stage. Consultation with the community forms an important part of this process. Practicality, technical feasibility, visual impact, cost and community preferences all need to be taken into account. Information on the type and nature of the proposed noise mitigation treatments are provided in the project environmental assessment documents.

During construction

While noise-reducing measures are taken, some noise disturbance may be unavoidable during the construction of highway upgrade projects. The most appropriate noise-reducing measures and their locations are decided after the preferred route has been chosen. The RTA's Environmental Noise Management Manual describes the steps to manage construction noise.

After construction

Following construction, the RTA undertakes noise assessments to record the actual level of noise being experienced. These checks help the RTA to assess the accuracy of noise predictions, the effectiveness of the noise-reducing measures adopted, and the need to implement further noise-reducing measures.

For further information, contact the NSW Roads and Traffic Authority, Pacific Highway Office on: Telephone (free call) 1800 653 092

Property acquisition

Upgrading the Pacific Highway



The Roads and Traffic Authority (RTA) sometimes need to purchase private property to build or improve a road. This fact sheet explains how property is acquired.

Is this a legal process?

The RTA can acquire land under the terms of the Roads Act 1993. Payment for land is assessed in accordance with the provisions of the *Land Acquisition* (*Just Terms Compensation*) Act, (referred to here as 'the Act').

One aim of the Act is to encourage the purchase of land by negotiation, rather than using the compulsory acquisition process. The RTA fully supports this objective.

Property owners are alerted to land acquisition requirements for roadworks through enquiries made when they are purchasing the property (to Council or the RTA), from proposals shown on Local Planning Schemes, or through the RTA's community involvement processes for new projects. New road proposals are made public as soon as possible. The RTA does not acquire more land than is necessary for roadworks.

How is land acquired by the RTA?

When a project has been assessed and approved, and before construction starts, the RTA sends a letter to the owners of each property affected by the road proposal. The owner is advised that a valuer representing the RTA will make an appointment to inspect the property and carry out a valuation prior to submitting a formal offer for the property.

The letter invites landowners to submit an asking price for the affected land, if they wish to. The Act guarantees that compensation will be not less than the market value of the land, and this value is considered to be unaffected by the road proposal. The RTA will make every effort to negotiate a mutually acceptable purchase agreement.

The RTA may give consideration in special circumstances to purchasing a property ahead of the construction phase, where the owner of the land to be acquired can show that a delay in this acquisition will cause hardship, as defined by the Act.

How much land is acquired?

If the RTA only requires a portion of a lot or property to build a road, the amount to be paid under partial acquisition is assessed using the 'before and after' method, involving two separate valuations. The first valuation is of the property unaffected by the road proposal. The second valuation is of the residue land at the same date, on the basis that the new road has been constructed and is in use.

The difference between the two valuations is the payment for the partial acquisition reflecting any reduction in value of the remaining land. The RTA will also adjust services or public utilities and relocate fences, as needed.

The RTA's solicitor prepares contracts when negotiations are complete and an agreement on the purchase price is reached. The purchase and transfer of property is completed in a similar way to an open market sale.

Do I have to sell my land?

If a mutually acceptable purchase agreement cannot be reached between the property owner and the RTA, a 'Proposed Acquisition Notice' to compulsorily acquire land under the Act may be issued.

Compulsory acquisition can provide a way to resolve a dispute about the amount of compensation payable. If the Minister for Roads gives approval, a 'Proposed Acquisition Notice' is issued to the owner and any other party with a legal or equitable interest in the land.

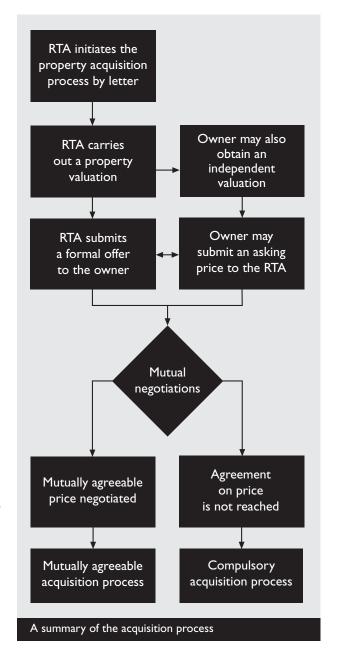
This notice advises the owner of the RTA's intention to acquire the land after 90 days, or the Minister may approve acquisition in a shorter period. After this period, and upon publication in the Government Gazette, the land converts to RTA ownership, with the former owner's interest being converted to an entitlement to compensation.

What is the amount of compensation?

Recipients of a Proposed Acquisition Notice can lodge a claim for compensation with the RTA. The Valuer General determines the amount of compensation, including legal and valuation costs, to be offered to the owner in return for the compulsory acquisition of property.

How do I know if the RTA's offer is fair?

The property owner may obtain an independent valuation and these valuation fees can be reimbursed by the RTA (up to an amount specified by letter).



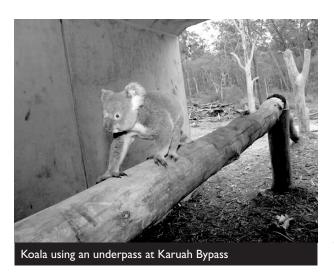
For further information, or to request a copy of the RTA's Land Acquisitions Policy Statement 1999, please contact the Roads and Traffic Authority, Pacific Highway Office on: Telephone (free call) 1800 653 092

Meeting environmental needs

Upgrading the Pacific Highway



The Roads and Traffic Authority (RTA) is committed to avoiding or minimising the potential effects of Pacific Highway upgrading projects on the environment. The RTA develops its projects to firstly avoid impacting on the environment, and where impacts cannot be avoided it uses environmental management tools to reduce impacts. This fact sheet explains those measures.



Environmental assessment and community consultation help to determine the scope and shape of highway upgrading projects before construction begins. Some of the RTA's environmental assessment and management processes are outlined below.

Environmental assessment

The RTA ensures that any potential environmental impact is managed according to current State and Federal environmental legislation.

Environmental studies investigate and assess the possible result of proposed works on:

- Flora and fauna, including habitats.
- Aquatic ecology.
- Noise and vibration.

- Air and water quality.
- Hydrology, drainage and flooding.
- Geology/soils.
- Cultural heritage (indigenous and non-indigenous).
- Property and land use.
- Local community and business.
- Traffic and transport.
- Visual quality and landscape character.

The RTA prepares an environmental assessment for the project as required by the Environmental Planning and Assessment (EP&A) Act and the RTA's own guidelines.

When preparing an environmental assessment, the RTA liaises with various organisations, including State Government agencies, local government, the community and other groups or individuals as appropriate.



Community involvement

Community involvement ensures effective planning and decision making. It provides important information on RTA road development and maintenance proposals and helps to identify major issues and possible community concerns.

The RTA works to create interest and awareness in options and proposals to provide opportunities for the community to be involved in contributing to decisions that affect them.

The RTA seeks community involvement through activities such as community information evenings and workshops, community focus or liaison groups, media announcements, letterbox drops, site open days, advisory committees, newsletters and questionnaires.

Community consultation occurs in the early planning stages of Pacific Highway upgrades and may form part of the RTA's overall environmental management strategy.

Documents are placed on exhibition for public information and comment. Issues raised in submissions from the community are considered when making a decision on a project.



Environmental management

The RTA uses a range of measures to minimise the effects on the environment during the construction and operation of a project. These measures include:

- Erosion and sedimentation controls.
- Heritage investigations and controls.
- Noise treatments.

- Noise, dust, air and water quality monitoring.
- In important fauna areas, fauna crossings such as combined drainage/fauna structures, fauna underpasses, fauna exclusion fencing.
- Revegetation with (local) native species.



Fauna exclusion fencing

A construction environmental management plan or other environmental plans are prepared for each Pacific Highway upgrading project. The plan describes how to implement measures to protect the environment and how the conditions of approval identified during the environmental assessment will be met.



For further information, contact the NSW Roads and Traffic Authority, Pacific Highway Office on: Telephone (free call) 1800 653 092, or visit the RTA's website at: http://www.rta.nsw.gov.au/pacific. Click on 'Managing the Environment'

Environmental Assessment - Part 3A

Upgrading the Pacific Highway



The NSW Roads and Traffic Authority (RTA) is required under the Environmental Planning and Assessment Act to undertake an environmental assessment of all projects to upgrade the Pacific Highway. This fact sheet explains the process.

Part 3A

The Environmental Planning and Assessment Amendment [Infrastructure and Other Planning Reform] Act 2005 amends the Environmental Planning and Assessment Act, 1979 (EP&A). Assessment of most of the RTA's major infrastructure projects will now be conducted under part 3A of the EP&A Act. Part 3A applies to all infrastructure projects that would have otherwise required an environmental impact statement (EIS) under Part 5 of the EP&A Act, most development previously classified as State Significant, and other projects, and plans or programs of works as declared by the Minister for Planning. Part 3A of the Act commenced on I August 2005.

Projects which are not assessed under Part 3A would be assessed under Parts 4 or 5 of the EP&A Act as appropriate.

Assessing project impacts

The focus of the new Part 3A assessment is to ensure that the community is consulted and an environmental assessment is undertaken. This assessment will focus on the key issues that are identified by the Department of Planning (DoP) and other agencies as important to evaluate the proposal, including potential social, economic or environmental impacts.

Part 3A also provides that concept plans for projects may be required by, or submitted to, DoP for approval. Concept plan approvals may consider route development options and determine the future assessment requirements for a project.

The environmental assessment process

To commence environmental assessment for a project under Part 3A, the RTA would lodge an application for project approval and a preliminary environmental assessment with the Director General of the DoP. The application will be advertised and posted on the Department's website within 14 days of submission.

After the application is submitted the Director-General consults various public agencies and councils before providing the RTA with a list of requirements for the environmental assessment.

The RTA then undertakes the assessment in accordance with these requirements and submits the assessment to the Director-General of the DoP for consideration.

The environmental assessment may contain a draft Statement of Commitments indicating the measures proposed by the RTA to minimise the impact of the proposal on the environment.

The Director General will consider the adequacy of the environmental assessment and may request additional information or a revised assessment.

After it is accepted by the Director-General, the environmental assessment will be publically displayed for at least 30 days and written submissions may be made by any person within that time.

At the end of the display, the Director General may provide the RTA with a copy of the submissions or a summary of the issues raised. The RTA will be asked to respond to the issues and may modify the proposal and the draft Statement of Commitments to minimise impacts on the environment.

If the RTA changes the proposal or the Statement of Commitments in response to the issues raised, a preferred project report describing the revised project would be prepared and made publically available for information.

The Director-General then consults with agencies and councils and provides an assessment report for consideration by the Minister for Planning.

The Minister for Planning decides whether to approve the proposal, with or without conditions.

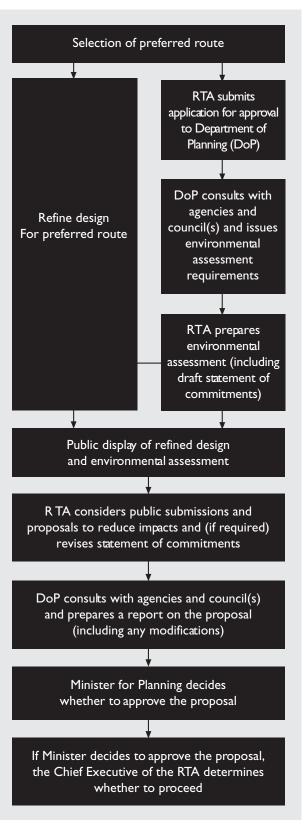
If the Minister approves the proposal, the Chief Executive of the RTA considers the approval and determines whether to proceed.

The assessment report and Minister's decision will be placed on the Department of Planning's website and potentially in other locations within 14 days. The RTA would also upload the assessment to its website.

The following diagram describes the major steps under the new Part 3A assessment and approval process.

When will the RTA conduct Part 3A environmental assessment?

The assessment required for approval of the project takes place once the Director General's requirements are received. The design and environmental assessment are then displayed for community comment after the Department of Planning has accepted the assessment as meeting its requirements, and prior to the DoP's report on the application and determination by the Minister for Planning (see diagram opposite).



Part 3A of EP&A Act, simplified approval process chart