



Sydney Gateway

Noise and vibration

We are moving forward with planning for Sydney Gateway—a new toll-free connection from the Sydney motorway network at St Peters Interchange to Sydney Airport and beyond. It will make journeys from the west and south-west to Sydney Airport, the M5 and the Eastern Distributor easier, faster and safer.

Thank you for your feedback so far on Sydney Gateway and on your questions about noise and vibration.

This fact sheet provides information on:

- how we have assessed and measured noise and vibration
- noise you may hear while we are working
- vibration you may experience while we are working
- how we will mitigate noise and vibration
- noise levels once Sydney Gateway is open to traffic.

Assessing our noise and vibration

We carried out a thorough noise and vibration assessment examining the potential impact to you when we build Sydney Gateway and once it opens.



Interactive portal

Visit our new interactive portal to explore Sydney Gateway, read the combined EIS and preliminary draft MDP or make a submission: rms.nsw.gov.au/sydneygatewayportal

The assessments involved identifying areas which may experience changed levels of noise or vibration as a result of our work, assessing the types and significance of the impact and how we will reduce and manage them.

Noise when we are working

What you may hear while we are working will depend on the type of work we are doing and the time of day we are carrying out our construction activities. For example, piling (driving large poles for foundations into the ground) is much louder than spraying new lines onto roads.

How noise is perceived is personal and can depend on the environment. Because of this, sound may also seem louder in some situations than others. The information below explains how we measure noise and what this will mean for you depending on which parts of our work you are located near.

Construction worker doing low-noise work



How we measure noise

Noise is measured and assessed in decibels (dB). Our ears generally don't notice changes in noise of one to two decibels. We also don't hear changes in noise incrementally. We hear a change of 10 decibels as almost half or double the previous noise.

Noise is measured, predicted and assessed in accordance with the relevant legislative guidelines.

When we predict you may experience noise levels above the guidelines, we will implement additional mitigation measures and monitor noise levels. Our assessments are conservative and always assess the worst case scenario. We often find when we are working the noise generated is less than we predicted.

Day and night Noise Management Levels (NMLs)

We use NMLs to assess whether you will be impacted by noise from our work. The NML is equal to the current noise level at the quietest time of the day or night, plus 10 decibels during the day or five decibels at night. You are considered to be affected by noise if our work is predicted to be 10 decibels more than your current noise levels during the day and five decibels more at night.



There are different NMLs for non-residential properties which may be more sensitive to changes in noise levels. These includes hospitals, schools, places of worship, childcare centres and recreational spaces. We will work closely with any sensitive receivers such as these to manage the potential impacts of our work.

Highly noise affected



You are considered to be highly noise affected when the noise levels are predicted to be over 75 decibels. 75 decibels is comparable to the noise made by a vacuum cleaner. We will look at ways to further mitigate noise if you have been assessed as highly noise affected.

Nearby hotels may experience increases in noise during construction, but overall there will be minimal impact to occupants. We will continue to work with hotels to minimise impacts.

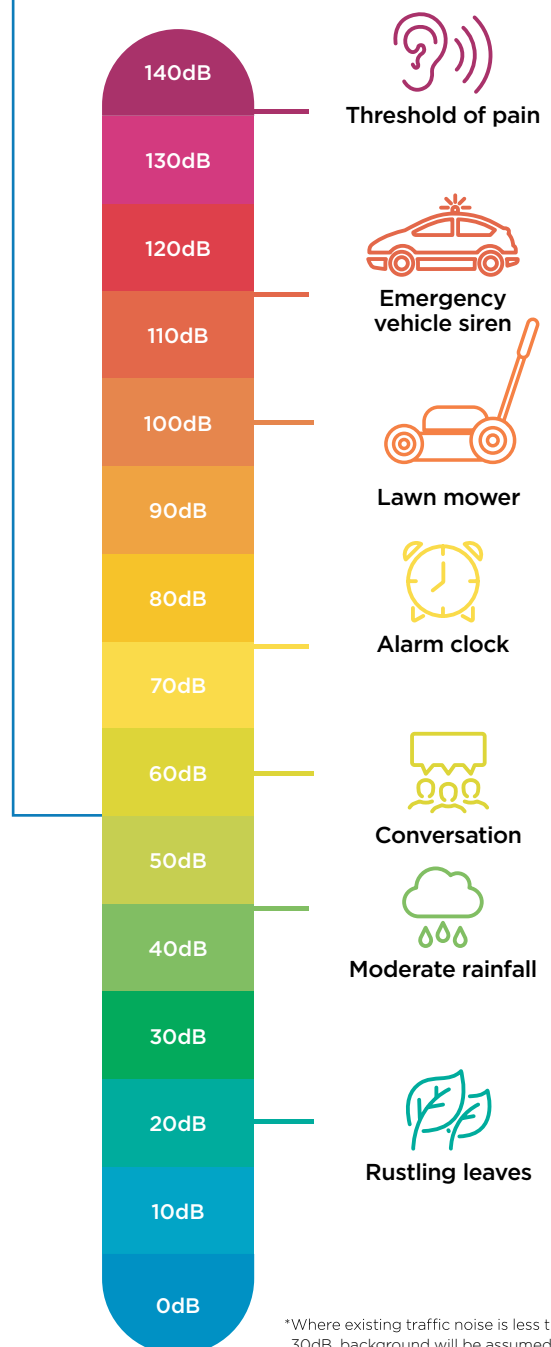
Standard guidelines for noise are:

-  **50** decibels at night
-  **55** decibels during the day

for new **freeways or main roads**

-  **55** decibels at night
-  **60** decibels during the day

for upgrades of **existing roads**



*Where existing traffic noise is less than 30dB, background will be assumed to be 30dB.

Noise from construction traffic

Our work will generate more trucks and cars on the road. We expect the increase in road traffic noise will be less than two decibels, which is within our guidelines and means you are unlikely to notice any change.

Reducing the impact of our work

We will monitor noise and vibration to make sure it meets our guidelines and is consistent with our predictions presented in the combined EIS and draft MDP.

We will be using a range of measures to reduce the impact of our work. These will vary depending on the site and type of work we are doing. Some examples of how we will be managing noise and vibration include:

- using low noise pavements
- laying out our sites so noisy equipment is shielded by other buildings wherever possible
- monitoring noise and vibration during our work
- carrying out noisy activities during the day wherever possible
- ensuring equipment is serviced and maintained
- turning off machinery and equipment when not in use
- providing respite (breaks from our work) where possible
- providing alternative accommodation to residents, where feasible or reasonable
- providing additional notification and consultation about upcoming work.

As we build Sydney Gateway, noise and vibration monitoring will also allow us to check how effective our management methods are and if we need to make changes.

We will also be installing a noise wall next to the International terminal connection (near South Street) about five metres high.

A Construction Noise and Vibration Management Plan will be prepared by our construction contractor and approved by the DPIE before we start building Sydney Gateway. This plan will detail processes, responsibilities and measures to manage noise and vibration and minimise the potential for impacts during construction, which the construction contractor must follow.

Proposed location of noise wall in Tempe



When we open to traffic

Some areas will benefit from a reduction in noise as the result of reduced traffic on local roads. We acknowledge our project will introduce new sources of road traffic noise to some areas, with some properties on Smith Street and South Street noticing some increases in noise. A new noise barrier will be built in Tempe as part of Sydney Gateway.

We have identified and assessed all properties that may be affected by the project when it is open to traffic.

We always try to mitigate noise at the source first, such as installing low noise pavement. If this does not reduce the noise enough, or is not feasible, we will then look at other options. This includes measures like building noise walls or providing your property with noise treatments.

We will be identifying properties which will be potentially eligible for noise treatment. Properties identified as eligible for noise treatment are subject to further investigation and assessment as the project progresses.

If your property is eligible we will be in contact with you later in 2020. We want to start our treatment program as early as possible so you may benefit from reduced noise early in construction.

You do not need to contact us as we will be in touch with you directly if you are eligible.

Vibration you may feel

We know many people can be sensitive to vibration, even at low levels. That is why we have carried out a thorough noise and vibration assessment examining the potential impact vibration could have on you.

Unlike noise, it is difficult to predict vibration. Soil type, the type of rock below the surface, building types and foundations, and equipment being used are just some of the variables that can alter the scale of its impact.

We assessed for:

- how your comfort might be affected
- potential structural impacts to buildings
- potential impact to sensitive equipment in surrounding buildings.

Vibration monitors will be used where required to provide real-time notification of potential exceedances in vibration levels. Where vibration needs to be monitored, we will ensure those nearby to our monitoring are notified in advance of us setting up our equipment.

Property condition surveys

We will offer you a property condition survey if you are located within 50 metres of our work sites. This will provide a clear record of your property's condition before work starts.

Property condition surveys will be completed before and after Sydney Gateway is completed to assess if the condition of your property has experienced any structural changes over the course of the project's construction. Outcomes of final surveys will be addressed.

Make a submission on our combined EIS and preliminary draft MDP

Sydney Gateway passes through both Sydney Airport land, owned by the Commonwealth, and State land under the jurisdiction of the NSW Government.

As a result the project requires two planning approvals to move forward:

- NSW Government approval, which requires the exhibition of an EIS; and
- Australian Commonwealth approval, which requires the exhibition of a preliminary draft MDP.

You can make submissions about the proposed project under the NSW or Commonwealth planning process, or both.





The EIS will be on exhibition from Wednesday 20 November until Thursday 19 December 2019.


Submissions must be received by DPIE www.planningportal.nsw.gov.au/major-projects/projects/on-exhibition.

The preliminary draft MDP will be on exhibition from Wednesday 20 November until Friday 21 February 2020.

Submissions must be received by Sydney Airport Corporation www.sydneyairport.com.au/sydneygateway.

Contact the Sydney Gateway team

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If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 654 446.

Privacy. Roads and Maritime Services ("we") are collecting your personal information in connection with the Sydney Gateway ("the Project"). In addition to collecting your name and contact details we may collect other information such as your submissions and other communications with us. We will retain and use this information for consultation purposes, including communications and analysis in connection with the Project. We will **not** disclose your personal information to third parties unless authorised by law and if we include your submissions in any public report we will not identify you. Providing your personal information is voluntary but if you do not provide it we may not include you on our stakeholder database and you might miss further consultation opportunities. Your personal information will be held by us and you can contact us to access or correct it. Please write to us at either sydneygateway@rms.nsw.gov.au or Roads and Maritime Services, Locked bag 928, North Sydney NSW 2059.