

Update on Hampden Bridge load limit reduction

May 2025



Transport for NSW has delayed the implementation of the reduced load limit on Hampden Bridge to give road users more time to plan their transition.

The new load limit will now take effect from **Friday 27 June 2025**, at which time the bridge's load limit will be reduced from **42.5 tonnes to 23 tonnes**.

To support the transition, from **Friday 30 May**, a 10 km/h speed limit will be in place on the bridge, along with traffic control during busy periods. There will also be increased police presence and monitoring of heavy vehicle weights in the area to help ensure safety and compliance.

You do not need any special approvals or permits to use the bridge during this time, provided your vehicle meets the existing load limit.

We understand this change may cause disruption, and we sincerely apologise for the inconvenience. We've explored a number of options and are continuing to work on solutions to ensure the bridge is operational long term.

Come and talk to us

Transport will be in Kangaroo Valley on **Thursday 5 June**, to answer your questions about the upcoming load limit reduction on Hampden Bridge.

Drop in anytime to speak with the project team, learn more about why this change is needed, and find out what it means for you.

Where: Kangaroo Valley Public Hall

Address: 179 Moss Vale Road, Kangaroo Valley

When: Thursday 5 June, 5pm-7pm

Can't make it to the drop-in session?

You can still reach us by phone or email. Also see below to view a list of frequently asked questions and answers about this change.

Thank you for your continued cooperation.

What is the history of Hampden Bridge and its previous load limits?

The Hampden Bridge at Kangaroo Valley is Australia's only surviving example of a colonial suspension bridge. It is a three-pin steel cable suspension bridge with timber stiffening trusses and timber deck. It was designed by Edward de Burgh and built between 1895 and 1898 by the NSW Department of Public Works. The bridge is 77 metres long (single clear span) with a 5.6 metre wide deck carriageway.

The bridge was designed to 14.5 tonne loading. In 1968 the bridge's limit was increased to 20 tonnes and in 2003 to 42.5 tonnes.

Since 2003 there have been ongoing issues with the bridge that have required higher than normal maintenance intervention and repairs. This is now known to be due to the strain from these heavier vehicles using the bridge and therefore overloading its capacity.

The load limit is being reduced to reduce strain on the bridge while Transport explores options to ensure its continued functionality and longevity.

Hampden Bridge, which was opened to traffic in 1898, is of historical and technical significance.

It is listed on the State Heritage Register, the National Trust Heritage Register and the Engineers Australia Register.

What work has been done on Hampden Bridge?

Work has been carried out regularly on Hampden Bridge for many years to keep it safe and in working condition. Engineers have carried out detailed inspections, testing and strengthening work. Major maintenance has included:

- · adding new steel and timber supports to strengthen the bridge
- · replacing damaged timber blocks and steel parts
- repairing or replacing broken joints and loose bolts
- · replacing the original steel hangers, which were worn out from heavy loads
- · ongoing work to control rust and corrosion on the main cables and other metal components
- · installing new bearings and reinforcing the timber beams underneath the bridge
- · strengthening timber sections known as "chords" that have been failing over time
- using a range of tests including x-rays to detect cracks and fatigue in key areas
- carefully replacing old parts with new materials to keep the bridge's original design and weight balance.

What repairs have been done, and what did they show?

In 2011, major strengthening works were carried out. These included:

- · replacing the timber deck
- · improving support at each end of the bridge
- replacing worn bearings and important connection points.

Despite this, several parts of the bridge - especially the timber trusses that help carry the weight - continue to show signs of wear and tear. Some damage is becoming increasingly hard to predict and could lead to a significant failure which would mean the bridge would need to be closed long term.

Recently, Transport and external engineering experts conducted in-depth inspections, load testing and structural analysis to understand how the bridge performs under its current 42.5 tonne load limit. These assessments showed the bridge is under too much strain. Strain sensors installed on the bridge have confirmed this.

Has Transport looked at ways to keep the current load limit?

Yes. All maintenance and strengthening work has aimed to safely keep the bridge open under the current 42.5 tonne load.

However, the bridge was built in 1898 - long before today's heavy trucks -and it was never designed for modern freight vehicles.

Hampden Bridge is a significant heritage structure. It's listed on:

- the NSW State Heritage Register
- · the National Trust's Heritage Register
- the Engineers Australia Register

- the Shoalhaven Local Environmental Plan 2014
- Transport's own Heritage and Conservation Register.

Because of this, any upgrades must legally respect the bridge's heritage value, which limits the kind of work that can be done. This also significantly increases the time to plan work as approvals need to be sought under legislation that would not be required on other projects.

Engineering testing shows key parts of the bridge are under excessive strain and are starting to fail. It is becoming increasingly more likely that key parts will fail with the current load limit. If this happens, it would mean sudden and complete closures of the bridge for long lengths of time. This is something we want to avoid.

Why wasn't there community consultation before the load limit was reduced?

The decision to reduce the bridge's load limit was based on expert advice from structural engineers, using detailed testing and risk assessments. The change was made to ensure public safety and, unfortunately, there are no other alternatives.

We understand some businesses and services will be significantly affected, and we are working to support them where possible.

What happens next while a long-term solution is considered?

Regular inspections and maintenance will continue. Over the next few months, some parts of the bridge that have been damaged will be repaired or replaced. The community will be informed in advance of any work.

This work will not affect the look and feel of the bridge or affect its heritage value.

The new 23 tonne load limit will reduce pressure on the bridge and help prevent further damage to the key elements, which will hopefully prevent the bridge having to fully close for a long period of time.

Was there a report that led to this decision?

Yes, a detailed engineering report led to this decision.

Specialist engineers carried out in-depth assessments and load testing on Hampden Bridge. These tests confirmed the bridge can no longer safely support vehicles weighing 42.5 tonnes. While the full reports are not available to the public, Transport made the decision based on expert advice and data.

Originally, engineers recommended lowering the load limit to 20 tonnes. This was based on testing that showed strain on the bridge was reduced by half when compared to the higher 42.5 tonne limit.

Further testing was then done using 28, 35 and 42 tonne vehicle combinations. These tests helped confirm that 20 tonnes was the safest option in terms of reducing strain.

However, after considering the needs of the community - particularly for school and tourist buses - the limit was adjusted slightly to 23 tonnes. This limit was found to keep strain levels within acceptable limits.

What happens if the load limit isn't reduced?

Through regular inspections, parts of the bridge have been found to be damaged. If the current load limit remains in place, further damage will continue. This could lead to sudden, full closures of the bridge for long periods, impacting the community, freight and emergency services.

How long has Transport known about these issues?

Transport has been carrying out work with the objective of allowing the current load limit. Our priority has always been to maintain as much access as safely possible.

Over the past 12 months, engineers have been conducting detailed investigations and testing to see how the bridge is functioning. These results have made it clear that reducing the load limit is the only way to keep the bridge open safely.

Is Transport looking at building a new bridge?

Yes, a new bridge is one of the options being considered as a long-term solution. This would need to be prioritised against other transport projects across the state and would require considerable investment.

The current length of the bridge over the river is 77 metres and this means any new bridge would be complex and come at a high cost.

Planning, development and construction for a new bridge would take between five and eight years.

Can the existing bridge be upgraded to carry 42.5 tonnes again?

Strengthening the existing bridge to handle heavier vehicles up to 42.5 tonnes again would be a major and complex project that comes with risks, especially given the bridge's heritage status.

An updated Heritage Conservation Management Plan would be required along with environmental and heritage approvals.

Transport will consider all options for the bridge before moving into detailed design where these details will be refined.

Can a temporary bridge be built while repairs are made?

No, not at this time. This is due to the long span of the bridge over the river and gorge. However, we are investigating whether a temporary support system for the existing bridge could be introduced. Costs and community impacts, including bridge closures, are currently being assessed.

If a temporary support system is deemed to be feasible to allow heavier vehicles up to 42.5 tonnes on the bridge, Transport will consult with the public regarding the impacts to the bridge to confirm whether this is a preferred option.

When will you know what needs to be done to allow heavy vehicles back on the bridge?

This is a complex process, with a standard bridge project of this size taking a couple of years. Given the heritage protections and unique engineering challenges that Hampden Bridge poses, it is difficult to put an exact timeframe against the project, but we will work to develop and deliver a solution as soon as practicable. Updates will be shared with the community as planning progresses.

Can I apply for an exemption to cross the bridge for business needs?

Transport is not able to grant exemptions for vehicles over 23 tonnes as it's likely their continued travel would cause damage to the bridge, resulting in sudden, long-term closures.

Will emergency services still be able to use the bridge?

Yes. Emergency services vehicles - including those over 23 tonnes - will still be able to use the bridge at all times.



Contact us

If you have any questions about this work or would like more information, please contact the project team:

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