Windsor Bridge replacement project

Project update – traffic design improvement

October 2019

Construction work on Windsor Bridge started in September 2018. The new bridge is on track to be opened to traffic mid-2020.

Proposed design change to improve traffic flow

The Windsor Bridge Replacement Project Environmental Impact Statement (EIS) was exhibited in November 2012 and received planning approval in December 2013.

More than seven years have passed since the traffic assessment was completed as part of the EIS. While we have continued to develop and build the new bridge, we have also taken the opportunity to carry out updated traffic studies in 2017 and 2019.

The new traffic modelling indicated a change to the existing design would allow traffic to flow better northbound during the afternoon.

This project update provides an overview of the proposed improvement and outlines the next steps.
The new bridge will:

- Improve safety for motorists, pedestrians and cyclists
- Improve traffic flow with wider lanes and shoulders
- Improve cyclist and pedestrian connectivity to the Hawkesbury
- Withstand higher flood levels
- Unify the open space in Thompson Square

Map of the proposed modification

Key
- New road
- Proposed design improvement
- Shared pedestrian/cycle path
- Access stairs
- Traffic lights

Design overview

1 – Two northbound through lanes

2 – New northbound 100m lane merging onto bridge
The proposed design change would have the following benefits for traffic:

- improved northbound traffic flow through the Bridge and George Street intersection
- reduced delays in afternoon peak including at the Bridge and George streets intersection
- improved travel times and reliability and reduced queue lengths in the afternoon peak
- the predicted waiting times during the afternoon peak would reduce from 62 seconds to 20 seconds, based on predicted traffic volumes in 2026.

Overview of the improvement

For northbound traffic, the project’s current design has one lane turning left from Bridge Street into George Street and one lane going straight through and over the new bridge.

Roads and Maritime Services is proposing two minor design changes that our traffic modelling shows would improve northbound traffic flow and reduce congestion and travel times for all road users.

1. Two through lanes at the northbound approach of the Bridge and George streets intersection

   Instead of only one northbound lane going straight through and over the new bridge, vehicles will be able to go over the bridge from both the left and right lanes. This would improve traffic flow and reduce travel times by allowing two lanes of northbound traffic to move through the intersection at a time, rather than one.

   - Left lane: shared left turn and through lane
   - Right lane: dedicated through lane.

2. A new merge lane exiting the Bridge and George streets intersection

   With two lanes of traffic travelling through the intersection, there would be a merging area on the other side of the intersection to merge the traffic back into a single lane

   - a 100 metre long merge lane
   - the extra lane merges into one northbound lane on the new bridge.

   This change would improve traffic flow by allowing two lanes to travel through the intersection, then merge before reaching the new bridge.

   The updated traffic studies showed this minor adjustment could significantly reduce afternoon peak congestion for northbound vehicles. From the Bridge and George streets intersection, the predicted waiting times during the afternoon peak would reduce from 62 seconds to 20 seconds, based on predicted traffic volumes in 2026.
Artist’s impressions of Bridge Street looking south west

Artist’s impression of Bridge Street with the project’s approved single northbound lane configuration – indicative only

Artist’s impression of Bridge Street with proposed additional northbound merge lane – indicative only

Windsor Bridge replacement project
More than 25,000 vehicles are expected to use the new bridge each day by 2026 and we’re ensuring we take a long term view of traffic performance in the area and future proofing this intersection. The updated traffic modelling we carried out in 2017 and 2019 has created an opportunity for us to improve traffic outcomes in the area and help fulfill longer term road network needs in the area.

Adding this change at the same time we are already working in the area to build the new bridge, reduces the prospect of needing any future changes on Thompson Square.

The upgraded Thompson Square will still deliver positive outcomes for the community from the project including:

- reuniting the green space
- connecting George Street businesses to the river foreshore
- providing a new viewing platform for the community
- enabling a diverse range of heritage interpretation outcomes throughout the area.

**What are the impacts?**

**Thompson Square parkland**

The strip of extra space needed for the merge lane will reduce the Thompson Square parkland by 160 square metres. However, the access and amenity of Thompson Square as per the approved project will be maintained. Any further visual impact from the proposed design change has been assessed in the modification report as being minor.

The proposed design change still results in an increase to the overall unified open space in Thompson Square. The unified open space in the square at the end of the project will be 3780 square metres. Importantly though, the space will be unified and useable.

**Tree removal**

No existing trees or trees proposed to be planted in the future landscaping for the project will be affected by the proposed change to the project’s design. This includes the large Hoop Pine “Christmas Tree” in Thompson Square, which will continue to remain unaffected.

Strict environmental controls continue to remain in place on the project, as outlined in the EIS, Construction Environmental Management Plans, and the Conditions of Approval from the Department of Planning and Environment.

**Noise**

Noise monitoring has indicated the design modification will not impose any additional impacts on noise levels on nearby properties.

**Heritage and archaeology**

No heritage buildings surrounding the Thompson Square will be impacted by the modification. Any excavation will be managed under the supervision of the project’s archaeology team as required under the existing project approval.
Public exhibition of the Modification report

The Department of Planning, Infrastructure and Environment (DPIE) will publicly display the Windsor Bridge Replacement Project design modification report until 7 November 2019.

Community members are welcome to make submissions to the DPIE. All submissions received on the Modification report will be considered and responded to in a submissions report.

The modification report is available for inspection online at:

- The DPIE website: planningportal.nsw.gov.au/major-projects

The report is also available at the following display locations:

- Hawkesbury City Council – 366 George Street, Windsor, NSW 2756
- Hawkesbury Central Library – 300 George Street, Windsor, NSW 2756
- Department of Planning, Industry & Environment – 320 Pitt Street, Sydney, NSW, 2000
- Roads & Maritime Services – 20–44 Ennis Road, Milsons Point, NSW 2061

How to make a submission

Submissions must be in writing and can be lodged online through:

The DPIE website: majorprojects.planning.nsw.gov.au

You can also send a submission by post to:

Attention: Director, Transport Assessments, Department of Planning, Industry & Environment
GPO 39, Sydney, NSW 2001

The submissions should state the application number 20191010100151

The Department of Planning, Infrastructure and Environment respects your right to privacy. Before lodging your submission online you will be asked to confirm that you have read the terms of the Privacy Statement available from planning.nsw.gov.au/privacy.

Submissions must be received by 7 November 2019.