

Questions and answers

April 2016

Project need and benefits

Q: Why does Windsor Bridge need to be replaced?

Parts of the existing Windsor Bridge are over 140 years old and are deteriorating due to age and heavy use. The bridge would need extensive and costly repairs if it was to be used and maintained into the future. In addition, the existing bridge does not meet current engineering and road safety standards such as minimum lane widths. The roads and intersections also have safety issues including a lack of safe pedestrian crossing locations and poor vehicle sight distances.

Q: What does the project involve?

Roads and Maritime is planning to replace the existing Windsor Bridge with a new bridge 35 metres downstream. New approach roads and intersections would be built and existing approach roads would be filled in and landscaped. Once the new bridge is open to traffic, the existing bridge would be removed.

Q: What are the benefits?

Benefits to the community include:

- Improved safety for motorists, pedestrians and cyclists from a new, reliable bridge
- Improved traffic flow from a bridge that allows two-way heavy vehicle traffic and shoulders for vehicle breakdowns
- Upgrading an essential local and regional road link across the Hawkesbury River at Windsor
- Improved traffic efficiency by installing traffic lights at the intersection of Bridge and George Streets and a new dual-lane roundabout at Freemans Reach Road and Wilberforce Road
- A new bridge that can cope with higher levels of flooding and will have the same flood immunity as surrounding approach roads on the northern riverbank
- Better access for pedestrians and cyclists from a three metre wide shared pedestrian and cycle path that provides safe, efficient connections to Thompson Square and surrounds
- Reduced road footprint within the Thompson Square heritage precinct
- A unified open space in Thompson Square increasing the usable area in the square by more than 500 square metres with direct access to the river.

Options

Q: Why not rehabilitate and maintain the old bridge?

Due to structural deterioration, the existing bridge would require significant repairs and strengthening to continue to be used for vehicle traffic.

Maintaining the existing bridge would require implementation of a vehicle load limit in the short term and eventual closure in the long term. The cost of upgrading the bridge to a lesser standard would be substantial for a limited lifespan.

Q: How was the new location chosen?

Roads and Maritime investigated the condition of the existing bridge and options to rehabilitate or replace it. We consulted the community on nine proposed options in 2009. After considering the feedback and further investigating the options we decided on the preferred option to replace the bridge in August 2011.

The preferred option provided the best outcomes in terms of value for money and achieving the project objective of providing a safe and reliable crossing of the Hawkesbury River for motorists, cyclists and pedestrians.

Q: Why not take traffic out of Windsor and bypass the town?

A bypass option was considered as part of the options assessment process and would involve building a replacement bridge via Pitt Town. This option was not preferred for a number of reasons:

- It would have a much higher cost than the preferred option
- Traffic volumes are too low to warrant a bypass
- It would not provide an efficient connection for local traffic into Windsor, which would reduce access to businesses in the town centre
- It would provide poor pedestrian and cyclist connectivity for Windsor town centre
- Large amounts of property acquisition would be needed
- It would have a high impact on potential Aboriginal heritage artefacts and the heritage character of Pitt Town and surrounds
- It would still require the refurbishment of the old bridge once the bypass is built. The refurbished bridge would have a limited lifespan at a high cost and would eventually need to be replaced.

For these reasons a bypass is not preferred at this time. More information about the options selection process is available in the Windsor Bridge options report (2011) on Roads and Maritime's website.

Design

Q: What type of bridge will be used?

The new bridge will be an incrementally launched bridge, which means the bridge deck will be built mostly from the northern bank. The new bridge would have four piers in the water, which is less than the old bridge.

Q: Why will the new bridge only have two lanes?

Data from traffic modelling shows that congestion is currently caused by the intersections on approach to the existing bridge. These will be upgraded as part of this project and will help to improve traffic flow across the new bridge.

The new bridge will be about 15.5 metres wide with a three metre wide shared path for pedestrians and cyclists. The traffic lanes will be 3.5 metres wide with two metre wide shoulders to provide space for vehicle breakdowns and maintenance. In future these shoulders could be reduced to provide for a third lane by line-marking without the need for further construction.

A wider bridge would need additional work to the approach roads and intersections which would have a significant impact on Thompson Square and the visual amenity of the area.

Q: How would a third lane help improve traffic flow?

The new bridge will have wide shoulders so that an additional southbound lane can be provided in future to help improve traffic flow. The additional lane can be implemented by changing the line marking on the bridge without the need for further construction.

The third lane would help improve traffic flow by providing more vehicle storage space between the George Street and Wilberforce Road intersections. However, implementing the third lane would mean reducing the wide shoulders on the bridge that provide space for vehicle breakdowns and maintenance. This means that vehicle breakdowns could cause traffic delays by blocking the through lanes across the bridge.

Roads and Maritime will monitor traffic volumes over the new bridge once completed to assess the need for the third lane in the future.

Q: Why not install the additional southbound lane now?

Data from traffic modelling shows that the third lane would not be needed until about 2026. However, implementing the new third lane would mean reducing the wide shoulders in the bridge that provide space for vehicle breakdowns and maintenance. Roads and Maritime will take these factors into consideration when assessing the need for the third lane in the future.

Q: Would the new bridge be widened in future to provide more lanes?

The new bridge would not be widened in future due to a number of constraints. Widening the bridge would have significant impacts on Thompson Square and surrounding heritage sites and would also require significant network improvements and upgrades to the approach roads to increase traffic capacity.

Q: What will happen when traffic demand increases in the future?

Roads and Maritime will monitor traffic volumes over the new bridge once completed and will assess options for meeting future traffic growth, including improvements to the local and regional road network.

Q: How will the southern approach to the bridge change?

The new southern approach road to the bridge will run along Old Bridge Street beside the Thompson Square parkland area. The roundabout at George Street will be replaced by traffic lights to help improve traffic efficiency and provide safer access for pedestrians at this intersection.

Q. How will the new traffic light intersection help improve traffic flow?

One of the benefits of the project is that it will help improve traffic flow by improving the efficiency of the approach intersections. The signal phasing at the new traffic light intersection at George Street and Bridge Street will be synchronised with the existing lights at the Macquarie Street intersection to give priority to through traffic on Bridge Street during peak periods. This will contrast with the current situation where vehicles from George Street have equal priority at the roundabout.

Q: Why is there a roundabout on the Wilberforce side of the new bridge?

The new dual lane roundabout will feed traffic onto the bridge and allow motorists to use different lanes depending on their destination. This will help improve traffic flow on approach to the bridge. A roundabout was chosen instead of traffic lights due to the rural character and flooding impacts on this side of the bridge.

Q: What are the local traffic impacts as a result of the project?

Right turns into George Street towards Governor Philip Park will be banned for motorists travelling north. This will allow traffic to flow freely onto the bridge.

Q: How much higher is the new bridge than the existing one?

The deck of the new bridge will be about three metres higher at the northern bank and six metres higher at the southern bank to help reduce flooding impacts. However, the approach to the bridge beside the Thompson Square parkland won't be higher than the ground floor levels of the adjacent buildings. The lower height of this approach road was incorporated after considering feedback from the community about reducing visual impacts across Thompson Square.

Q. How will the new bridge have better flood immunity?

The replacement bridge will be higher than the existing bridge and will therefore be better able to cope with the impacts of flooding. The flood immunity of the new bridge will be around the one in three year flood level, whereas the existing bridge is about one in two years. More information about flooding impacts is available in section 7.9 of the Windsor Bridge environmental impact statement (2012) and section 2.11 of the submissions report (2013).

Q: What will happen to the Thompson Square parkland?

Through the development process the design has been refined to reduce visual impact on the Thompson Square parkland and maintain views across the square. By backfilling the existing approach road to the bridge, the project provides about 500 extra square metres of green open space in Thompson Square.

Roads and Maritime is preparing an urban design and landscaping plan for the project, including Thompson Square, and will invite feedback from the community and stakeholders in mid-2016.

Q: Will heritage buildings in Thompson Square be impacted?

No heritage buildings need to be removed as part of this project. Information about impacts to heritage buildings is outlined in the environmental impact statement.

Community involvement

Q: How has the community been kept informed about the project?

Roads and Maritime has kept the community informed about the project via a number of different methods including project update newsletters, newspaper advertisements, letterbox drops, emails to registered stakeholders, website updates, community information sessions, focus group meetings, shopping centre displays and door knocking.

Q: When did community consultation take place?

Feedback was first invited from the community in July 2009 when nine options were displayed for comment. Following the announcement of the preferred option in August 2011, further feedback was invited from the community to inform the concept design. The latest consultation period was carried out in November 2012 with the display of the concept design and environmental impact statement.

Q: What has the community been consulted on?

The community has had the opportunity to comment on:

- The location of the new bridge, the type of bridge and how it will look
- The approach to Windsor town and how to minimise impacts to Thompson Square
- The future renewal of Thompson Square
- Design and heritage matters
- Local road changes and location of footpaths and cycleways.

Q: What happened to the community focus group?

In October 2011 Roads and Maritime established a design and heritage community focus group to assist with the development of the concept design and environmental assessment of the project. The group met seven times in total.

The group had an independent facilitator and included members from the project team, local residents, businesses, industry and interest groups. The group provided feedback to the project team on topics including bridge type selection, archaeology, heritage and traffic matters.

The outputs of the focus group have been taken into consideration in the development of the project and feedback will be sought in future if required.

Q: Will there be any further consultation with the community?

We will invite feedback from the community and stakeholders in mid-2016 on the proposed urban design and landscaping plan.

Construction

Q: When was the project approved for construction?

Roads and Maritime received approval to deliver the project in December 2013 under Part 5.1 of the *Environmental Planning and Assessment Act 1979*.

Q: When will construction work start?

Construction work to build the replacement bridge is expected to start in mid-2017 and will take about two years to complete, weather permitting.

Q: What activities will be carried out before construction starts?

From April 2016, Roads and Maritime will carry out environmental and heritage investigations to inform the detailed design for the project and meet our project approval conditions. Work will include:

- An archaeological investigation program including heritage, Aboriginal and maritime studies
- Archival recording of historic sites at Thompson Square, Windsor Bridge and surrounds
- Environmental investigations including water quality monitoring.

Residents and businesses near the project area will be notified before work starts and we will keep the community informed as it progresses.

Q: How will impacts to Thompson Square be minimised?

A number of plans will be implemented to help minimise construction impacts including traffic management, air and water quality, noise and vibration and heritage. The main construction compound will be located on the northern bank to minimise impacts of construction vehicles and equipment in Windsor. Further information about managing construction impacts is outlined in the environmental impact statement.

To meet our project approval conditions we are preparing a Strategic Conservation Management Plan (SCMP) which will help us minimise impact to Thompson Square and historical sites in the area during construction.

Q: What are the upcoming project milestones?

- Start archaeological investigations, archival recording and environmental monitoring activities (early 2016)
- Consultation on urban design and landscaping (mid-2016)
- Finalise detailed design and award construction tender (early 2017)
- Start construction (mid-2017)
- Open to traffic (2019)

Q: How can I find out more information?

For more information about the project, please contact:

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