

Aerial photograph of the Caboolture West study area looking towards the Glass House Mountains. Source: Arup

November 2021

Bruce Highway Western Alternative Stage 1 (Caboolture West)

The Department of Transport and Main Roads (TMR) is progressing planning for a new transport corridor through Caboolture West in the Moreton Bay region between Moodlu and Moorina.

TMR is committed to providing an effective transport network for Queenslanders that will factor in the state's future growth, and will ensure the efficiency of the Bruce Highway is maintained.

The Australian Government and the Queensland Government are partners in the delivery of the North Brisbane Bruce Highway Western Alternative (BHWA) project. This is being delivered under a 50:50 (federal:state) basis, with both governments both committing \$10 million towards the project.

Early planning for the future BHWA is investigating a new transport corridor between Beerburrum and north Brisbane.

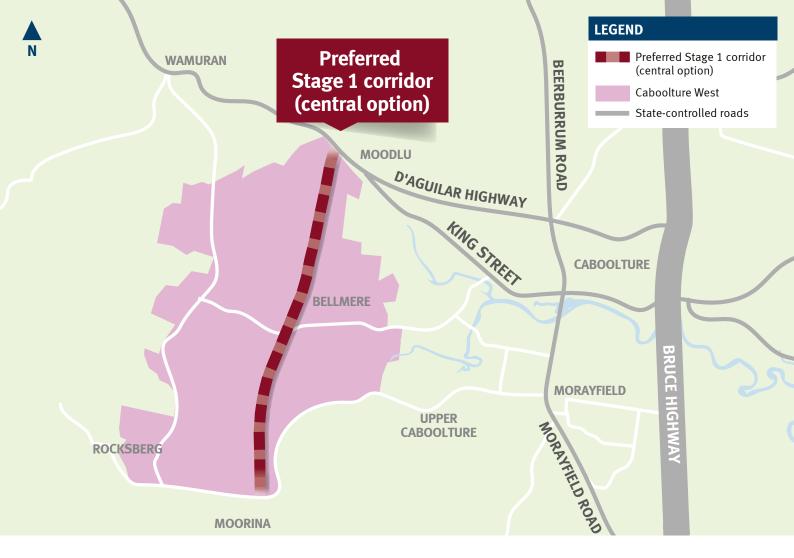
Given the need to identify land requirements through Caboolture West, planning for Stage 1 of the corridor, an 8.3 kilometre section between Moodlu to Moorina (Caboolture West), is being progressed as a priority.

Between 21 June and 6 August 2021, TMR sought feedback from the community on three options that had been identified for the future road through Caboolture West – an eastern, a central, and a western option.

Early planning has now been finalised for Stage 1, and a preferred alignment (including the corridor requirements) has been identified. In addition to considering the feedback received from the community, a broad range of technical investigations were undertaken. This includes traffic and network performance, natural and built conditions, safety, environmental, cultural heritage, legislative and engineering considerations, and future land use considerations.







Identifying a corridor

Early planning investigated three potential corridor options through Caboolture West. These three options have been explored and evaluated against a range of criteria. From a preliminary analysis, each option presented a range of opportunities and constraints involving property impacts, road connections, environmental and amenity considerations and constructability.

TMR advises that the central option has been identified as the preferred alignment for Stage 1 of the BHWA corridor. Feedback received from the community was a key consideration of the planning.

Location of the central alignment

The central option is about 8.3 kilometres in length and starts from the D'Aguilar Highway and travels south towards Caboolture River Road, staying close to the existing power easement.

The central option has been selected based on a number of significant technical merits, including the following key high-level considerations:

- impacts significantly fewer existing properties when compared to the eastern option
- enables better crossings of various waterways, reducing the corridor's environmental and flooding impacts additionally it will not impact Sheepstation Creek Conservation Park
- enables connectivity to the planned higher order road network within the Caboolture West Structure Plan it supports high level access to the proposed town centre, key enterprise and employment areas, and access to and from the D'Aguilar Highway
- has flatter terrain, meaning there is less need for bridge structures and less material will need to be removed during construction, reducing overall cost when compared to the other options.

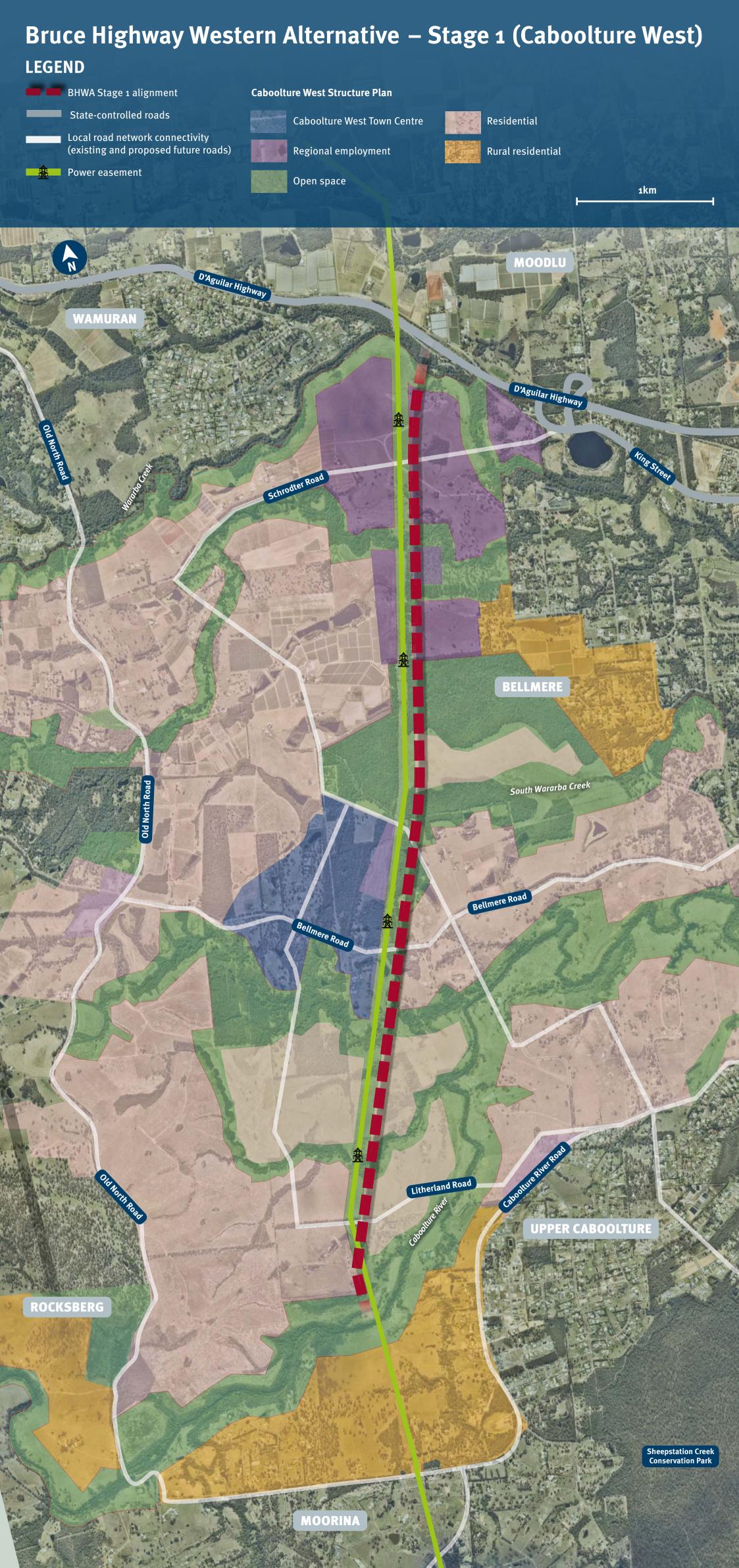
More detailed information on the technical investigations which helped identify the preferred option is provided on the following pages alongside the map.

Land requirements

The Queensland Government's responsibility to provide a better and safer transport network sometimes means that privately owned land may be acquired for transport infrastructure purposes.

Early planning for the project has identified the need for land requirements through Caboolture West.

TMR will consult with directly impacted landowners where property requirements have been identified for the proposed central corridor alignment. If a land requirement has been identified for your property which may require a future resumption, TMR will contact you and explain the process, including your rights as a property owner.



Determining the preferred option

Robust technical investigations were undertaken to identify the central option as the preferred alignment for Stage 1 of the BHWA corridor. Key technical considerations and findings are outlined below.

Engineering considerations – On balance, the central option has less engineering risks, less community impacts and a lower overall cost than the eastern or western option. It also enables better crossings of various waterways, reducing the corridor's environmental and flooding impacts.

Comparatively, the eastern option has flatter terrain but would require longer bridges to cross key waterways along its alignment. In addition, the eastern option would require significantly more existing property resumptions, which will result in greater community impacts and increase the overall cost of the option. A western option would have significantly less community impacts than either the central or eastern option; however, due to the challenging terrain in the western alignment, the western option would require a significant amount of cut and fill earthworks and much longer bridge structures, which significantly increases the overall cost of this option.

Transport and traffic performance – Traffic modelling undertaken to date, which accounts for the substantial growth across the Moreton Bay region, identified the eastern option would perform slightly better than the central option and much better than the western option. Of the three options investigated, the western option performed the worst, carrying the least traffic and generating higher congestion across the wider transport network. Although the eastern option performs slightly better than the central option, the significant property resumption requirements and associated community impacts of the eastern option outweigh its slight traffic and transport benefits compared to the central option.

As part of the technical investigations, traffic modelling also confirmed that a higher speed corridor with grade separated interchanges / overpasses would reduce congestion across the network, better support the Bruce Highway, and reduce the need for upgrades across the local transport network in the future.

Alignment with Caboolture West planning and the existing Caboolture community – In response to community feedback, the central option is now located as close as possible to the existing power easement.

Compared to the eastern and western options, the central option provides better outcomes for supporting future land uses of the Caboolture West emerging community. Importantly, the central option provides the best access to key future development areas such as the town centre and the enterprise and employment areas when compared to the other options. It also provides better opportunities for improving public transport and active transport (walking and cycling) trips to, from and within the Caboolture West development.

In addition, the design of the central alignment will support access to and from existing areas in Caboolture by accommodating high order local road connectivity proposed by the Caboolture West Structure Plan. For example, existing roads such as Litherland Road, Bellmere Road and Schrodter Road will be able to cross under or over the new regional road corridor.

Overall, the new regional corridor will improve connectivity for the existing Caboolture community as well as ensure excellent multimodal network connections for the emerging Caboolture West development area.

Interchange locations for the central option — A total of eight different potential interchange sites were explored along the central alignment. Interchanges are required to allow for the efficient movement of traffic between two or more high order roads (for example, highways) and are an important element in developing a connected transport network. The interchange locations investigated were identified and reviewed in collaboration with Moreton Bay

Regional Council and the Growth Areas Team including consideration to support the intent of the Caboolture West Structure Plan. Planning of the interchanges needs to provide access to the future town centre, provide highway connectivity, cater for public transport and provide access to key employment, health and education precincts. Interchanges will also provide access for longer distance trips to areas outside of the Caboolture West area including other parts of Moreton Bay, Brisbane and the Sunshine Coast.

Of the eight potential interchange locations, three are preferred: one to the north at D'Aguilar Highway, one in the middle to support the town centre and one to the south of Caboolture River. These interchanges will be critical to supporting the high forecast traffic demand on the corridor considering future stages of the BHWA.

Traffic modelling confirmed an interchange with the D'Aguilar Highway is critical to reducing congestion across the Caboolture West network and providing support to the Bruce Highway. In addition, traffic modelling also identified that an interchange at the future town centre, north of Bellmere Road, is critical to success of the new town centre. Further planning is required to refine the exact location of the interchange south of Caboolture River.

Social, environmental and cultural heritage considerations – as part of the technical work completed to date, environmental and cultural heritage assessments were undertaken and considered along with numerous other technical design issues and community concerns. To reduce the social impacts on existing and future land uses, technical investigations sought to align the corridor and interchanges as close as possible to the power easement while reducing earthworks required and improving amenity (for example, visual, noise, dust). These refinements also reduced the amount of potential land required in the future for the corridor. Key areas of environmental and cultural heritage value were identified and assessed in selecting the preferred alignment and interchange locations. This included identifying opportunities to reduce the overall environmental and cultural impact of the corridor and interchanges. Field work will be completed on the preferred option to further inform refinement of the alignment, including to minimise environmental and cultural heritage impacts, and to ensure the project complies with State and Federal Government legislation.

What will the future road look like?

The future BHWA will ultimately need to accommodate a duplicated road (four lanes, two in each direction) with a wide centre median and access via grade-separated interchanges at key locations. It will also make provision for off-road active transport, have flexibility for public transport, and utility services such as water, gas and power and underground communication and electrical infrastructure.

In terms of how wide the road will be, a typical corridor is about 90 metres wide, with additional width required for major cuttings and embankments and at major interchanges, which have higher land requirements due to their complex function and structure.

Community feedback

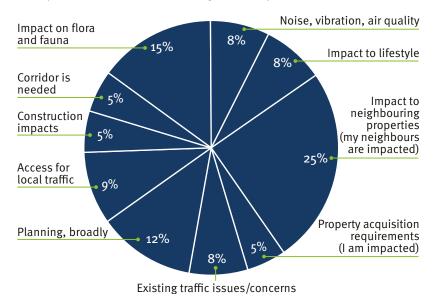
TMR would like to thank residents and the community for their contributions, interest and feedback provided during the first phase of community consultation. All feedback received has been considered during this important phase of planning.

During the six-week consultation period from 21 June 2021 to 6 August 2021, the online engagement page attracted 4915 views, 3047 visitors with 209 surveys submitted. The project team received more than 150 additional email submissions/contributions and more than 100 calls to the 1800 project hotline. The three community drop-in sessions attracted more than 300 people, and more than 500 people subscribed to receive project updates.

Feedback submissions received from the community covered a number of themes, including concerns about property impacts, land resumptions, impacts to wildlife and the natural environment, social amenity and lifestyle, as well as other issues.

The majority of people who took part in the community consultation were interested in providing feedback because they lived or worked in the area and/or travelled through the area as a motorist, bike rider or pedestrian.

The top feedback themes raised during community consultation were:



Stakeholder engagement

The following key stakeholders were and will continue to be engaged as part of the planning for this project.

- Local, state and federal elected representatives
- Moreton Bay Regional Council (Mayor, Councillors and technical officers)
- Kabi Kabi First Nation Traditional Owners Native Title Claim Group
- Landowners and other key stakeholders
- Department of State Development, Infrastructure, Local Government and Planning's Growth Areas Team
- Powerlink
- Unitywater

Project need

This alternative corridor will provide an effective transport network for future development and support future population growth in the broader Moreton Bay region. It will also preserve the existing function of the Bruce Highway as part of the National Land Transport Network to service long-distance traffic and freight between regional economical hubs on the East Coast of Australia.

The Caboolture West area has been identified as a major expansion area within the *South East Queensland Regional Plan (ShapingSEQ)*. It is Moreton Bay Regional Council's single largest growth area and is expected to accommodate a population of approximately 70,000 residents over the next 40 years.

On 25 March 2021, the Queensland Government announced the Caboolture West Local Plan as the first pilot site for the Department of State Development, Infrastructure, Local Government and Planning's Growth Areas Team to unlock growth, address housing choice and affordability and identify the infrastructure necessary to support more liveable communities. This continues the ongoing collaboration between Council, the Queensland Government and other stakeholders in planning for Caboolture West.

Existina local road in the study area. Source: TMR



Next steps

TMR will engage with landowners directly impacted by the preferred central option. TMR will continue to refine the corridor based on feedback from landowners and the community, with a view to protect the Stage 1 corridor through Caboolture West in early 2022.

Additional refinements to the identified Stage 1 corridor may be needed following gazettal of the corridor when outcomes of a new structure plan for Caboolture West are known. The review of the structure plan is being led by the Department of State Development, Infrastructure, Local Government and Planning Growth Areas Team and will build on the collaboration already underway with Moreton Bay Regional Council, Unitywater and landowners.

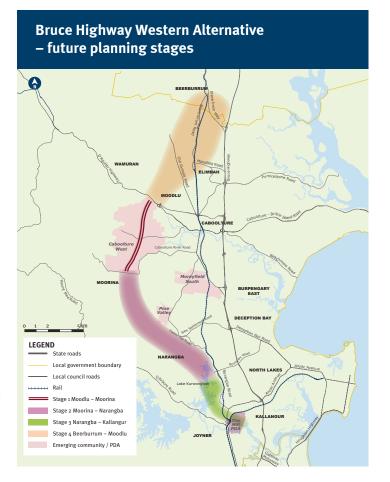
Timeframes for more detailed planning, design and construction of the BHWA Stage 1 (Caboolture West) project are not known at this time and will depend on future funding commitments.

Identifying and protecting the corridor for the future BHWA is an important transport planning initiative.

Protecting the land required for the full length of the BHWA is a priority for the Australian Government and the Queensland Government. Planning for the full length of the corridor will continue to be progressed following protection and gazettal of the corridor through Caboolture West.

Sections of the study area for the corridor are highly developed, with challenging terrain, environmental, flooding and other planning constraints. TMR is taking a staged approach to complete the planning and has considered development pressures and input from Moreton Bay Regional Council in prioritising the sequencing of future stages and corridor preservation activities.

The next priority is Stage 2 which runs south of Caboolture West from Moorina to Narangba and is about 13 kilometres in length. Planning to identify the land required for future stages will follow. TMR is now accepting early feedback from the community on Stage 2 and all future stages.



Project benefits









Reduces congestion



Enables appropriate growth in the region



Supports public and active transport



Supports the movement of freight



Creates a connected transport network for residents and road users

Find out more

You can find out more about the BHWA project, provide your feedback, and stay up to date on the planning and future community engagement activities.

Talk to the project team at an upcoming community drop-in session. Visit the project webpage on TMR's website for times and locations.



Scan to find out more

www.tmr.qld.gov.au

(search for North Brisbane Bruce Highway Western Alternative)

Contact us

The project team is available to answer questions and record your feedback.

- 1800 955 799* during business hours
- NCR_Planning_Comms@tmr.qld.gov.au
- www.tmr.qld.gov.au (search for North Brisbane Bruce Highway Western Alternative)
- Bruce Highway Western Alternative project team, Department of Transport and Main Roads PO Box 1600, Maroochydore Qld 4558

*Free call from anywhere in Australia, call charges apply for mobile phones and payphones. Check with your service provider for call costs.