

New England Highway, Tenterfield Heavy Vehicle Bypass – Shortlisted route corridors

The Australian Government has committed \$6 million for the planning of a heavy vehicle bypass at Tenterfield and an upgrade at Bolivia Hill.

The New England Highway is a major interstate freight route between Newcastle and Queensland and provides an alternative route to the Pacific Highway. The highway currently passes through Tenterfield's central business district, which causes traffic and safety issues from the mix of heavy vehicle and through traffic with local trips and pedestrian activity.

Project objectives are to:

- Improve road safety
- Improve road transport productivity, efficiency and reliability of travel
- Minimise the impact on the natural, cultural and built environment
- Provide sustainable economic outcomes for the local community
- Minimise social impact on the local community.
- Provide value for money.

Four corridors have been shortlisted for further investigation following assessment of the preliminary route options. The preliminary route options report outlines the assessment process and outcomes.

Your feedback is invited

To provide feedback on the shortlisted corridors, complete the feedback form or send your comments via:

- community.input@ghd.com
- Tenterfield Heavy Vehicle Bypass Project Team, Reply Paid 85012, Sydney NSW 2000

For more information visit the project website at rms.nsw.gov.au/roadprojects or call us toll free on **1800 810 680**.

Your feedback will continue to be valued as the development of the project progresses.

Assessment of preliminary route options

A preliminary route option assessment workshop was held to shortlist preliminary options for further development and evaluation. The workshop was attended by technical specialists from Roads and Maritime Services, GHD, Transport for NSW and the Australian Department of Infrastructure and Regional Development.

Table 1 outlines the assessment criteria and measures used to evaluate the preliminary route options. These are linked directly to the project objectives.

Table 1 – Preliminary route options assessment criteria

Project Objectives	Assessment criteria	Measures
Improve road safety.	<ul style="list-style-type: none"> • Reduced crash rates and injuries • Improved road safety and geometry standards • Minimise conflict points (intersections) on the highway • Constructability • Work health and safety in construction and maintenance. 	<ul style="list-style-type: none"> • Distance savings • Number of intersections.
Improve road transport productivity, efficiency and reliability of travel.	<ul style="list-style-type: none"> • Reduced road freight user costs • Reduced travel time • Provide a high level of service (limited congestion) along new route • Increase road network capacity. 	<ul style="list-style-type: none"> • Estimated travel time saving.
Minimise the impact on the natural, cultural and built environment.	<ul style="list-style-type: none"> • Impact on fauna habitat including threatened species • Impact on flora including threatened species • Water quality • Air quality • Noise and vibration impact • Aboriginal and non-Aboriginal heritage • Stormwater and drainage • Impact on residential and commercial properties • Ecological sustainability • Visual impact and amenity. 	<ul style="list-style-type: none"> • Multi-criteria analysis based on opportunities and constraints.
Provide sustainable economic outcomes for the local community.	<ul style="list-style-type: none"> • Impact on commercial activities in township (positive and negative) • Impact on retail industry activities in township (positive and negative) • Impact on tourism and accommodation industry activities in township (positive and negative) • Impact on transport industry activities in township (positive and negative). 	<ul style="list-style-type: none"> • Multi-criteria analysis based on opportunities and constraints.
Minimise social impact on the local community.	<ul style="list-style-type: none"> • Maintain community connectivity • Social impact on community groups/locations. 	<ul style="list-style-type: none"> • Proximity to town. • Potential severance impact.
Provide value for money.	<ul style="list-style-type: none"> • Benefit cost ratio (BCR) • Net present value over 30 years • Road user costs and benefits • Infrastructure operating costs (including maintenance) • Comparative project costs. 	<ul style="list-style-type: none"> • Strategic cost estimate.

Shortlisted options

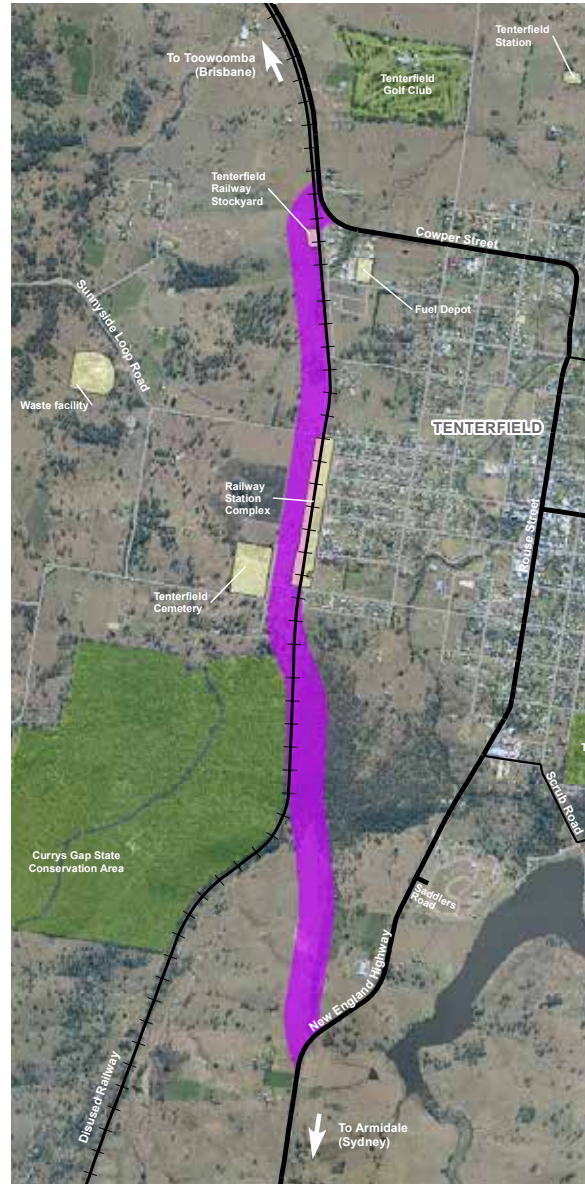
The preliminary route options were shortlisted and grouped into four broad corridors presented in the figures below. Roads and Maritime will now carry out further detailed geotechnical, environmental and property impact investigations on these corridors and present the findings of these investigations in a route options development report.

Blue Corridor



- Bypass starts south of Saddlers Road
- Aligns with the railway line east of Currys Gap State Conservation Area
- Crosses the railway to north of Currys Gap Creek
- Passes to the west of the cemetery
- Connects to highway north of Cowper Street.

Purple Corridor



- Bypass starts south of Saddlers Road
- Follows the railway line east of Currys Gap State Conservation Area
- Crosses railway, runs along Western Street and recrosses the railway north of Sunnyside Loop Road
- Connects to highway north of Cowper Street
- Most direct route.

Orange Corridor



- Bypass starts north of Tenterfield Creek Bridge
- Crosses railway north of Currys Gap State Conservation Area
- Travels west of the railway along Western Street
- Recrosses the railway line to Western Boundary Street connecting to the highway at Cowper Street.

Yellow Corridor



- Bypass starts north of Tenterfield Creek Bridge
- Aligns with Railway Avenue east of the railway line
- Connects to Western Boundary Street and the existing highway at Cowper Street
- Shortest option.

Table 2 – Comparing the shortlisted options

Option	Blue	Purple	Orange	Yellow
Distance (km)	5.3	4.8	3.8	3.7
Distance saving (km)*	1.1 saving	1.4 saving	0.6 saving	0.7 saving
Assumed design speed (km/h)*	90	80	70	70
Travel time saving (minutes)	3.0	2.9	1.8	1.9
Estimated cost (\$m)	\$90-100	\$85-95	\$50-60	\$55-65

*Distance savings compared to existing highway.

Eastern options

Roads and Maritime acknowledge the support from some sections of the community for a heavy vehicle bypass to the east of Tenterfield CBD. When assessed, the eastern options were generally longer, leading to poor performance against the *improve road transport productivity* and *provide value for money* project objectives. This was most evident in the options that passed south of the dam, and passed through steep terrain.

The eastern options that ran along East Street were designated a lower speed limit, further reducing the road transport productivity. East Street is largely residential, with a primary school and a large water reservoir at the southern end. The increase in traffic, including heavy vehicles, would reduce pedestrian safety, while increasing noise levels in the area. The terrain would also require the undulating road to be levelled out, creating property access issues such as steep driveways. As a result, these options performed poorly against the *minimise social impact on the community* and *minimise the impact on the natural, cultural and built environment* project objectives.

These inner eastern options would also restrict the expansion of the town to the east. The bypass would pass through the village zone identified in the Council's local environment plan, providing a barrier between the existing village and future growth areas.

In an effort to find a feasible eastern option for further assessment, a hybrid eastern route option incorporating the best features of all eastern options was developed. This is shown in the figure below.

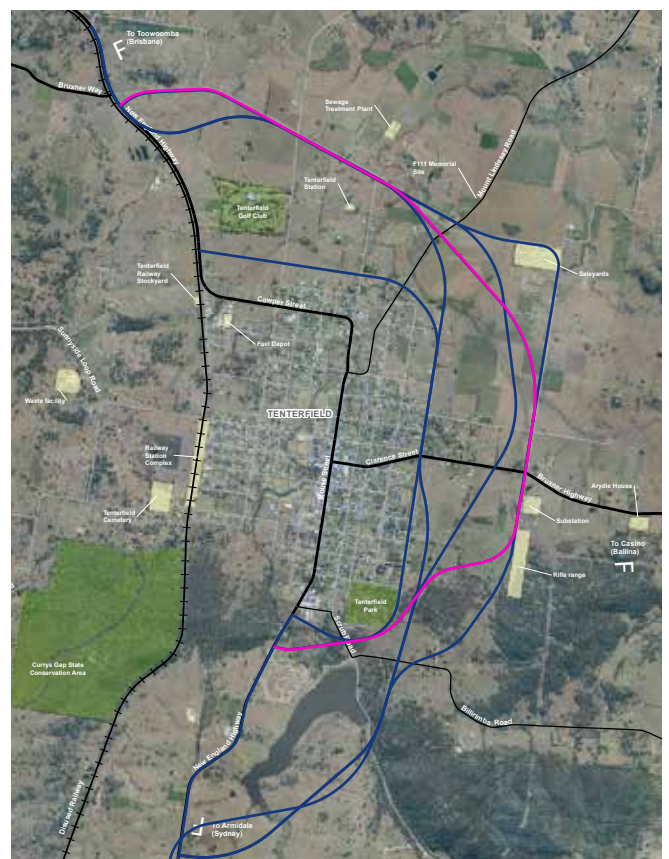
The hybrid option starts to the north of the dam, avoiding the steep terrain and the environmental impact of passing above the town's water supply, also reducing some of the length. The hybrid option then passes wide of town to avoid East Street and the associated social impacts. The hybrid option then cuts out the dog legged cause way, before joining Old Ballendean Road and reconnecting the highway just south of the Bruxner Way.

A summary of the hybrid eastern option is provided in the table below to demonstrate how it compares to the four shortlisted corridors.

Table 3 – Eastern hybrid option

Option	Eastern Hybrid
Distance (km)	9.6
Distance saving (km)	3.0 increase
Assumed design speed (km/h)	90
Travel time saving (minutes)	0
Estimated cost (\$m)	\$125-135

The assessment of the hybrid option shows that it is three kilometres longer and offers no travel time saving. Therefore the hybrid option is unlikely to attract heavy vehicle usage and heavy vehicles from the New England Highway would continue to use Rouse Street rather than the eastern hybrid option.



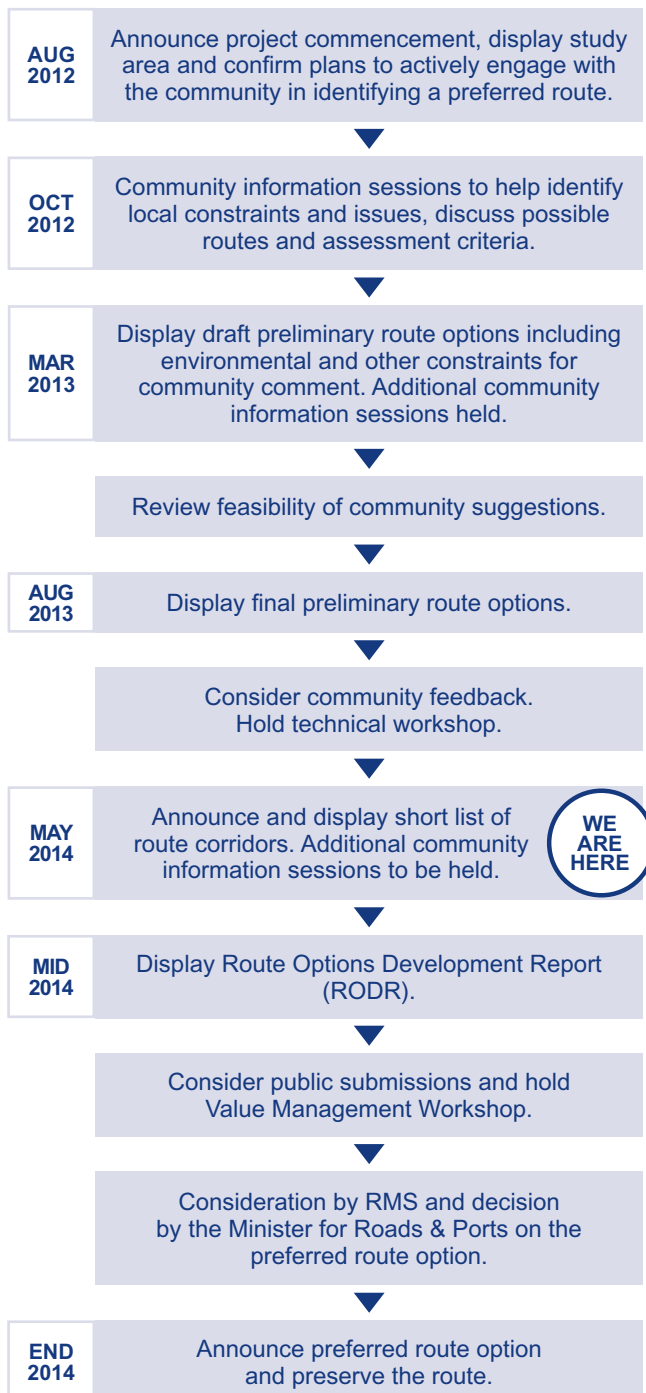
Eastern hybrid versus Eastern route options

- Eastern route options
- Eastern hybrid option

Next Steps

The next steps in the identification of a preferred option include:

- Review of community feedback on the shortlisted corridors
- Further investigations into the four shortlisted corridors including geotechnical, ecological and archaeological field investigations, as well as more detailed traffic modelling
- Conduct a value management workshop, with representatives from the community, business, government and technical experts. This workshop will review the work carried out to date and recommend a preferred option.



Have your say

To provide feedback on the shortlisted options you can complete the feedback form, write to Tenterfield Heavy Vehicle Bypass Project Team, Reply Paid 85012, Sydney NSW 2000, or email your comments to community.input@ghd.com

Please provide your comments by:

Tuesday 10 June 2014.

We invite you to community drop-in information sessions to discuss the shortlisted route options with the project team. No formal presentation will be given.

Where: Sir Henry Parkes Memorial School of Arts, Rouse Street, Tenterfield.

When: Wednesday 4 June, 4pm – 7pm
Thursday 5 June, 9am – 12pm

Contact us

For more information or to comment, please contact the project team at:

Phone: 1800 810 680 (toll free)

Email: community.input@ghd.com

Web: rms.nsw.gov.au/roadprojects/projects/north_eastern_region/new_england_tenterfield.html

Write to: Tenterfield heavy vehicle bypass project team
Reply Paid 85012 Sydney NSW 2000



This paper is • carbon neutral • Australian-made • recycled fibre • elemental chlorine free • pulp derived from sustainably managed sources.

© Roads and Maritime Services

Mail to:

Tenterfield heavy vehicle bypass project team
GHD – Tenterfield heavy vehicle bypass
Reply Paid 85012 Sydney NSW 2000

or

Email to: community.input@ghd.com

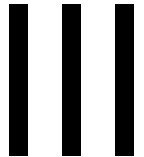
FOLD HERE FIRST



Transport
**Roads & Maritime
Services**

Delivery Address:
Level 15
133 -145 Castlereagh St
SYDNEY NSW 2000

No stamp required
if posted in Australia



Tenterfield
Heavy Vehicle Bypass
GHD
Reply Paid 85012
SYDNEY NSW 2000

FOLD HERE SECOND