

# Fact sheet

## Foxground and Berry bypass



Transport  
Roads & Maritime  
Services

3 JULY 2012

### How the cost estimates have been made

Please note that this fact sheet has been updated to correct overlaps between some items which meant that some double counting occurred. The internal and external independent reviewers have undertaken an additional analysis of the report and confirm that there are no other such discrepancies. It should be noted that the amount of the discrepancy (\$17.4 million) is covered by the overall contingency as noted in the *External Review Report* in table 4 in Section 2.9.2 (Sensitivity Analysis).

Roads and Maritime Services (RMS) has estimated the costs of a northern preferred route and suggested southern route for the Berry bypass, as part of a total cost estimate for the whole Foxground and Berry bypass (not just the Berry section).

The aim of the cost review was to understand the difference. As much as possible, these routes were compared in a like for like format (see pie chart below).

The cost estimate prepared by the RMS technical investigation group for the:

- northern preferred route is \$546 million;
- southern suggestion is \$711 million.

The difference is \$165 million.

#### The estimate is made up of:

- The cost to construct the road. This is: structures, earthworks, pavements, construction costs, land acquisition, project management and design.
- Contingency rates, which is an allowance for things we may not yet know about or we may not yet know their full impact. This is standard industry practice to cost for things that may come up later. As we do more investigation the risk of these things arising lessens.
- Adjustment items – we assumed some of the design ideas raised by the community may be feasible and they have been included within the project estimate for the northern and southern routes.



In the RMS report, the southern estimate includes:

- community suggestions to reduce the costs on the southern route (reducing total costs by approximately \$61 million);
- the sewerage treatment plant realignment, which adds \$10 million to the estimate.

The other key item we can consider is \$5 million to provide a northbound offload ramp under the Kangaroo Valley Road bridge.

This is an additional cost for the northern route as it was agreed to include this as part of the RMS preferred design option for the environmental assessment. As the design had been 'frozen', this is not included in the cost estimate.

Table 1 shows the costs if we include or exclude these items.

#### Contingency rates

RMS estimating guidelines recommend a contingency range of 35 to 70% for strategic cost estimates. From the spreadsheets on the website (called 'Supporting financial information') you can see RMS has applied a variety of contingency rates across the cost items in each estimate.

From these average contingency rates can be calculated for the costs of the northern preferred route and for the southern suggestion. Average contingencies are:

- RMS technical investigation group – 47% (southern) and 42% (northern);
- RMS project management office – 45% (southern) and 39% (northern).

The differences are based on the risk profile that each route has; as we know more about the northern route it has a lower contingency rate.

Notwithstanding the above, we have also prepared a cost if we apply the northern preferred route estimate's lower contingency rate to the southern estimate.

## Conclusion

When we:

- include the latest design for the northern route (Kangaroo Valley Road interchange);
- remove the sewerage treatment plant detour that adds some \$10 million in cost to the southern suggested route; and
- consider applying the same lower contingency rate to both route costs;

**The cost difference between the two routes remains at \$115 million or more.**

The table below summarises this.

**Table 1: Cost difference without sewerage treatment plant realignment and with northbound off ramp under Kangaroo Valley Road, in 2012 dollars.**

	RMS technical report with full contingency	RMS project management office review, with full contingency	RMS technical report using the same (northern) contingency for the southern suggestion	RMS project management office review using the same (northern) contingency for the southern suggestion
Estimated cost of the southern option	\$711 million *	\$730 million #	\$687 million *	\$700 million #
Estimated cost of the northern preferred route	\$546 million *	\$570 million #	\$546 million *	\$570 million #
Difference in base costs	<b>\$165 million</b>	<b>\$160 million</b>	<b>\$141 million</b>	<b>\$130 million</b>
Estimated cost of the southern option	\$711 million *	\$730 million #	\$687 million *	\$700 million #
<u>Cost without the sewerage treatment plant realignment</u>	<b>-\$10 million</b>	<b>-\$10 million</b>	<b>-\$10 million</b>	<b>-\$10 million</b>
<b>Subtotal</b>	\$701 million	\$720 million	\$677 million	\$690 million
Estimated cost of the northern preferred route	\$546 million *	\$570 million #	\$546 million *	\$570 million #
<u>Cost with the northbound off ramp under Kangaroo Valley Road</u>	<b>+\$5 million</b>	<b>+\$5 million</b>	<b>+\$5 million</b>	<b>+\$5 million</b>
<b>Subtotal</b>	\$551 million	\$575 million	\$551 million	\$575 million
<b>Adjusted Difference</b>	<b>\$150 million</b>	<b>\$145 million</b>	<b>\$126 million</b>	<b>\$115 million</b>

Key: \* Figures are rounded up to the next \$1 million.

# Figures rounded up to the nearest \$5 million

For further enquiries: Foxground and Berry bypass project team

Visit the project office on Fridays between 10am – 5pm (Broughton Court) shop 3/113 Queen Street, Berry  
PO Box Q410 QVB Post office, Sydney NSW 2000

[www.rms.nsw.gov.au/fbb](http://www.rms.nsw.gov.au/fbb) | T 1800 506 976 (freecall) | E [foxgroundandberrybypass@rms.nsw.gov.au](mailto:foxgroundandberrybypass@rms.nsw.gov.au)