Berry bypass review
Community Q & A session # 5
Welcome
Who is here?

Chair, Lucy Cole-Edelstein, Straight Talk

Gareth Ward, Member for Kiama

Brad Turner, Regional Manager, RMS

RMS Southern Region Office Project Team

Michael Moore, head of RMS technical investigation group

Dan Reeve, head of independent review team
Meeting agenda

6.30pm – Welcome, Lucy Cole-Edelstein

6.35pm – Address by local member, Gareth Ward MP

6.45pm – Introduction by Brad Turner

6.55pm – Costings presentation, Michael Moore, Dan Reeve

7.20pm – Next steps, Brad Turner

7.25pm – Q&A session, chaired by Lucy Cole-Edelstein

8.15pm – Close of Q&A session
Welcome by Brad Turner

• The Minister for Roads & Ports has decided on a northern alignment for the Berry bypass

• Tonight is about assisting the community to understand the basis for the decision, and

• To explain the process from here
On the project website you will find:
- the RMS technical investigation report
- the independent review report
- costings spreadsheets used for the cost estimate
- a fact sheet summarising how the cost estimate was developed

If you require further information, or are unclear about the content of the website, please contact a member of the project team.
## Community consultation and engagement

<table>
<thead>
<tr>
<th>DATE</th>
<th>MILESTONE</th>
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<tbody>
<tr>
<td>2006</td>
<td>Development of route options for the Gerringong to Bomaderry Princes Highway upgrade</td>
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<tr>
<td>2009</td>
<td>A preferred route is finalised for Foxground and Berry bypass (to the north of Berry)</td>
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<tr>
<td>Dec 2011</td>
<td>Revised preferred northern alignment is announced as a result of extended community consultation</td>
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<tr>
<td>Dec 2011</td>
<td>RMS receives community submission for a southern suggestion</td>
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<tr>
<td>Feb 2012</td>
<td>Minister for Roads requests RMS conduct a detailed cost evaluation of a southern Berry bypass route</td>
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<tr>
<td>Feb–Jun 2012</td>
<td>RMS technical investigation group prepares two route feasibility estimates</td>
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<td>Feb–Jun 2012</td>
<td>Estimates witnessed and reviewed by an independent review team</td>
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<tr>
<td>Jun 2012</td>
<td>Minister for Roads announces the preferred northern alignment as the bypass route</td>
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Q & A presentation 3 July 2012
Community consultation and engagement

Since December 2011:

- Incorporation of community suggestions into both route designs
- 5 community Q & A sessions
- 12 working group meetings
- Meetings with property owners and community groups
- Regularly updated Issues, Actions and Outcomes Register
- Regularly updated project website
- 1800# community information line
- Project office
Community consultation and engagement

- The project office has been open from the announcement through to COB last Friday

- Almost 200 people visited to discuss the project with the subject matter experts

- There have been over 2000 hits on the project website

- We’ve contacted over 100 property owners and stakeholders
• There was some double counting of a deduction for provisional items in the document that was initially published

• These errors *do not* affect the recommendation or decision

• They have been amended in the republished report, as well as in all other RMS publications
• The report has also been re-examined by the independent reviewers

• External Review Report, Section 2.9.2, Table 4 includes a Sensitivity Analysis.

• The independent reviewer has advised the amount of the discrepancy would be covered by the overall contingency. The independent reviewers can discuss this with you, if required.
An independent review of the process to investigate the cost of a southern Berry bypass was also undertaken, comprising of an external independent review team:

- headed by SMEC;
- working with Lyall & Associates; and
- RMS Project Management Office (a review team separate from the project and the technical investigation group).
• Work undertaken by the technical investigation group was witnessed and reviewed by the independent review team to assure the process was thorough and impartial.

• The independent review team was not responsible for the decision on whether a southern suggestion was financially feasible.
When we last met we outlined the estimating process. Today we’re here to talk to you about the outputs.

- Principles of the estimating process:
  - follow RMS estimating guidelines
  - follow standard civil engineering estimating practice
  - produce a strategic level cost estimate

- Independent reviewer confirmed RMS’ technical investigation group work
  “in accordance with RMS procedures and best practice guidelines”
Role of the technical investigation group (continued)

- The technical investigation group (TIG) was formed by RMS to:
  - investigate a suggested southern Berry bypass route
  - produce a strategic cost estimate
  - prepare a detailed technical report

- The TIG prepared two route cost estimates for the Foxground and Berry bypass, one incorporating a bypass to the north of Berry and one to the south.

- The TIG was not responsible for decision on whether a southern suggestion was financially feasible.

MM
The cost in the technical report includes:

- a 12.8 km upgrade from Toolijooa Road to Croziers Road
- a base case design for a northern route and for a southern route
- construction and contractor and client costs
- contingencies
- adjustment costs
The cost is roughly made up of:

- 60% construction costs
- 10% client costs
- 30% contingency
Understanding the costing review (continued)

• Cost estimate in RMS’ technical investigation group report:
  - northern preferred route is $546 million
  - southern route is $711 million

RMS TIG southern route costs $165 million more
What DOES this include?

- Both routes include base case conforming design, contractor and client costs, and contingency.

- Three adjustment items for the southern route:
  - realignment south of the sewerage treatment plant (+$)
  - an island embankment (-$)
  - balanced earthworks (-$)

- The adjustments total a net $51 million reduction to the RMS TIG southern route, but have no impact on the northern route.
What does this NOT include?

- Four provisional items (discretionary) which would increase costs on the northern route

These are:

- a new pedestrian bridge on North Street
- split ramps for the new Kangaroo Valley Road interchange
- extending the northbound offload ramp under the Kangaroo Valley Road interchange bridge
- providing land for a future (second) northbound offload ramp
Why is there such a big difference in cost?

Three key reasons:

- earthworks volume
  - north 1.30 million m$^3$, south 1.97 million m$^3$ (+52%)

- geotech - soft soil improvement
  - north limited, south 20,000 m$^2$ (2 hectares) stone columns

- length of bridges
  - north 1.20 km, south 1.50 km (+25%)
Contingencies differ for the two routes

- more information is available for northern route, so risk profiles differ. This is standard cost estimating practice.

Overall contingency applied by RMS technical investigation group:

- northern preferred route 42%
- southern suggestion 47%

RMS guidelines recommend contingency of 35-70% on major projects.

Independent reviewer:

“The level of contingency is appropriate for the strategic estimates”  

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Recap:

• The estimate in RMS’ technical investigation group report:
  - northern route - $546 million
  - southern route - $711 million

Independent reviewer found the two estimates “directly comparable, balanced and reasonable for strategic estimates”

**RMS TIG southern route costs $165 million more**
### Cost difference

<table>
<thead>
<tr>
<th><strong>RMS technical investigation group:</strong></th>
<th>$165 million</th>
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<tbody>
<tr>
<td>With adjustment and provisional items:</td>
<td>$150 million</td>
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<tr>
<td>With a 42% contingency for both:</td>
<td>$126 million</td>
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<table>
<thead>
<tr>
<th><strong>RMS peer review</strong></th>
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<tbody>
<tr>
<td>With adjustment and provisional items:</td>
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<tr>
<td>With a 39% contingency for both:</td>
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Regardless of which way the cost is prepared, the southern route still costs over $100 million more.
Consideration of adjustment and provisional sums

- **northern route** + new design for Kangaroo Valley Road interchange
  \($546\text{ million }+\text{ }$5\text{ million}\) = \text{ $551\text{ million}$$}\)

- **southern route** excluding deviation south of sewage treatment plant
  \($711\text{ million }-\text{ }$10\text{ million}\) = \text{ $701\text{ million}$$}\)

Then RMS TIG southern route costs $150 million more

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Changes to the RMS TIG estimate (since announcement)

- **southern route** - correcting the double counting of two deduction adjustment sums increased the cost by $17 million - so the estimated cost is **$711 million**

- **northern route** - correcting the addition of two ‘mutually exclusive’ provisional sums has decreased the cost by $5 million - so the potential maximum cost is **$566 million**

**RMS TIG estimate for northern route remains unchanged at $546 million**
• southern route - $720 million
  (including savings for island embankment, balanced earthworks, and excluding extra cost for realignment south of sewage treatment plant)

• northern route - $575 million
  (including extra cost to extend northbound ramp under KVR interchange bridge – provisional sum)

RMS PMO southern route costs $145 million more
These costs are different to the RMS TIG estimate because:

• RMS project management office peer reviewers assessed risks a little differently and included some small costs not identified by the RMS technical investigation group.

• However, for estimating at the strategic level, cost differences between the routes are comparable.

RMS PMO southern route costs $145 million more
The overall contingency applied by RMS peer review:

- northern preferred route 39%
- southern suggestion 45%

RMS guidelines recommend a contingency of 35-70% on major projects

**RMS PMO southern route costs $115 million more**
## Process of the northern Berry bypass environmental assessment

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>December 2010</td>
<td>RMS submits a major project application to the Director-General of the Department of Planning and Infrastructure.</td>
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<tr>
<td>March 2011</td>
<td>Director-General provides assessment requirements.</td>
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<tr>
<td>March 2011</td>
<td>RMS begins an environmental assessment.</td>
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<tr>
<td>MID 2012</td>
<td>RMS finalises an environmental assessment.</td>
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<tr>
<td>Late 2012</td>
<td>Environmental assessment on public display. Formal submissions invited.</td>
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<tr>
<td>Department of Planning and Infrastructure provides RMS with a copy of the submissions to the assessment.</td>
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<tr>
<td>RMS considers the submissions, revises the project, and prepares a submissions and preferred project report.</td>
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<tr>
<td>Submissions and preferred project report on public display. Ongoing community consultation.</td>
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<tr>
<td>Assessment report prepared by the Director-General of the Department of Planning and Infrastructure.</td>
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<tr>
<td>Minister for Planning decides whether or not to approve the project and the conditions to be attached to any approval.</td>
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Where to from here? Environmental assessment process
For more information

- Project information line 1800 506 976
- Project email foxgroundandberrybypass@rms.nsw.gov.au
- Berry project office (Broughton Court) shop 3/113 Queen Street Berry (open on Fridays 10am – 5pm)
- Regular contact with the project email database
- Letterbox drop project updates
- Advertising in local publications
- Meetings on request with individuals, groups and stakeholders

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