F3 to Sydney Orbital Link Study
Newsletter No. 2 - July 2003

Have your say on the options

The purpose of this newsletter is to provide information on the outcomes of the study to date and invite your comments on four route options that are now under consideration. Your comments will help the study team develop its recommendations.

The study

In March 2002 the Federal Government announced the commencement of a study into options for a new National Highway route between the Sydney to Newcastle Freeway (F3) and the Sydney Orbital. The new route would replace Pennant Hills Road as the National Highway.

The aim of this study is to identify a new route that would:

• Alleviate traffic congestion and improve travel reliability on the National Highway.
• Reduce the operating costs of long-distance commercial and freight transport.
• Improve road safety on the National Highway.
• Improve local amenity (reduce traffic, air and noise emissions and severance) for people living and working along Pennant Hills Road.
• Minimise social and environmental impacts during construction and operation.
• Provide opportunities for improved public transport.
• Integrate with the regional transport network.
• Serve the future growth needs of long-distance transport.
• Be economically justifiable and affordable to government.

Pennant Hills Road currently has poor roadside and travelling conditions, with traffic congestion and low traffic speed for long periods of the day. There are large numbers of vehicles on this road, including a high proportion of heavy vehicles, resulting in high noise levels, poor road safety and a general loss of amenity for the local community and road users.

Sinclair Knight Merz is undertaking the study, which is being funded by the Federal Government and coordinated by the New South Wales Roads and Traffic Authority (RTA).

What has happened since Newsletter No 1

An initial newsletter, in April 2002, described the study’s scope and invited comments and suggestions. Since then, environmental, social, economic, transport and engineering studies have been undertaken to identify opportunities and constraints in the study area for developing a new road connection between the F3 and the Sydney Orbital.

A comprehensive community involvement program has been an important part of this process. To date, this has involved:

• Distribution of Newsletter No 1 to 115,000 households and businesses.
• Information days at five locations in May 2002, attended by about 2,000 people.
• Two rounds of meetings of Community Focus Groups (more are planned).
• More than 2,000 phone calls, e-mails and letters to the study team, expressing community views.

The feedback so far generally supports the construction of a new link that would reduce congestion on Pennant Hills Road. Of concern are potential impacts on properties (including property acquisitions), noise generation, air quality impacts and other impacts on the general amenity of communities.

There is also concern that any new route should avoid impacts on National Parks, bushland reserves and other sensitive environmental areas, such as Berowra Valley Regional Park and Galston Gorge, and impacts on indigenous heritage sites.

IN THIS ISSUE:
The study so far
Why a new link is needed
Process for identifying options
The feasible options
Invitation to comment on the options under consideration
How to submit your comments

Figure 1 - Study Area. The study area extends from the Sydney to Newcastle Freeway (F3) at Kariong, on the Central Coast, to the northern section of the Sydney Orbital, from Dean Park in the west to the M2 Motorway at Macquarie Park in the east.

Facts about Pennant Hills Road:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 km between the F3 and the Sydney Orbital</td>
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<tr>
<td>Up to 75,000 vehicles per day</td>
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<td>10-12% trucks (about half are long articulated vehicles)</td>
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<tr>
<td>Average traffic speeds as low as 14 km/h in peak periods</td>
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<td>Road accident rate nearly twice the Sydney average for arterial roads</td>
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</tbody>
</table>
Why a new link is needed:

- To alleviate poor travelling conditions (traffic congestion, high number of road crashes) on the interim National Highway and surrounding network.
- To improve quality of life and local amenity for people living and working along Pennant Hills Road.
- To improve travel reliability and to reduce vehicle operating costs for long-distance commercial and freight transport.
- To serve the future growth needs of long-distance transport.

Study process for identifying options

Three broad corridor types

In such a large study area, stretching from Kariong on the F3 Freeway in the north to the M2 Motorway and the Western Sydney Orbital in the south, there are numerous possible routes. Many route suggestions have come from the community.

Route options may be grouped into three corridor types:

- **Corridor Type A**: more easterly options, mostly in tunnel, connecting the M2 to the F3 at Wahroonga.
- **Corridor Type B**: central options, connecting the Sydney Orbital between Pennant Hills Road and Dean Park with the F3 north of Hornsby but south of the Hawkesbury River.
- **Corridor Type C**: western options, connecting the Sydney Orbital between Pennant Hills Road and Dean Park with the F3 north of the Hawkesbury River, necessitating a new crossing of the Hawkesbury River.

Assessment of the three broad corridor types

Corridor Types A, B and C have been assessed against a comprehensive range of criteria, including land use characteristics, urban design considerations, economic costs and benefits, environmental and social impacts (beneficial and adverse), transport and traffic conditions and engineering requirements (topography, design considerations, space requirements, relationship with existing roads, interchanges, etc).

Further information has been prepared to provide a more detailed explanation of the assessment of corridor types. This information can be viewed on the study website and at the displays and Council libraries shown on the last page of this newsletter.

The study findings indicate that corridor Type A options are preferred, as they would best meet the project objectives by:

- Reducing traffic volumes and congestion on Pennant Hills Road, potentially by up to 40,000 vehicles per day in 2021.
- Minimising community impacts. All of the corridor Type A options have been developed with most of their length in tunnel. This would minimise the impacts of land acquisition, severance of communities, noise generation and impacts on natural areas. By diverting the highest proportion of traffic off Pennant Hills Road, Type A options would also significantly improve social amenity for existing residents.

**Corridor Type A options** would generally be less expensive than corridor Type B and C options, with preliminary construction capital cost estimates of between $1.5 billion and $2.2 billion in 2003 dollars.

**By comparison, Corridor Types B and C would:**

- Remove less traffic from Pennant Hills Road (fewer than 10,000 vehicles per day in 2021).
- Require significant land acquisition, sever a number of communities and require greater noise and other environmental mitigation measures.
- Potentially have greater impacts on National Parks, reserves and other bushland areas, endangered ecological communities and indigenous heritage sites.
- Cost between $1.6 billion and $3.6 billion in 2003 dollars to construct.

All three corridor types have potential environmental issues that would need to be fully evaluated and managed.

Public transport and rail freight

The study has also assessed the likely impacts of planned and proposed improvements to local, regional and long-distance public transport and rail freight infrastructure and services between Sydney and the Central Coast.

These initiatives would contribute to sustainable transport, permitting rail to play a much greater role, especially for freight.

Even with large-scale shifts to use of public transport and rail freight however, total road freight transport demand is still forecast to nearly double over the next 20 years. This means that the public transport and rail freight initiatives, by themselves, would not overcome the congestion on Pennant Hills Road.
Four feasible “Type A” tunnel route options

Four main Concept Type A options have been identified. All four options would mostly be in tunnel. These route options (Purple, Blue, Yellow and Red) are illustrated on the map below. Each of the options is shown as a white band, because there is no definitive route at this stage.

The final route would be determined in the form of an Environmental Impact Statement (EIS), which would be publicly exhibited and community approval would need to be sought through this stage.

Each Type A option has different benefits and impacts. Preliminary concepts, benefits, disadvantages examined and community input to date, are summarised in a Table on the other side of this page. We invite your views on the four Type A route options.

Features of the Type A Purple option from the M2 Motorway at Pennant Hills Road to the F3 Freeway at Wahroonga

- Approximately 7.5 km of dual two or three-lane tunnels plus approximately 500 metres of 4 or 6 lane trench in the vicinity of the Brickyard Pit at Thornleigh.
- The southern interchange (with the M2) would directly connect the new National Highway link with the M2 (to and from the west only) and Pennant Hills Road (to and from the south). Connections with the M2 to and from the east would be via Pennant Hills Road.
- The northern interchange (at Wahroonga) would directly connect the new link with the F3 with new links to and from Pennant Hills Road.
- Options for these interchanges are still being investigated.
- The tunnels would not pass under any major waterways along the route.

Features of the Type A Blue option from the M2 Motorway at Pennant Hills Road to the F3 Freeway at Wahroonga

- Approximately 8 km of dual two or three-lane tunnels.
- The southern interchange (with the M2) would directly connect the new National Highway link with the M2 (to and from the west only) and Pennant Hills Road (to and from the south). Connections with the M2 to and from the east would be via Pennant Hills Road.
- The northern interchange (at Wahroonga) would directly connect the new link with both the F3 and the Pacific Highway /Pennant Hills Road.
- Options for these interchanges are still being investigated.
- The tunnels would pass under Copes Creek.

Features of the Type A Yellow option from either side of the M2 Motorway tunnels at North Epping to the F3 Freeway at Wahroonga

- Approximately 6.5 km of dual two or three-lane tunnels, including a 2.5 km eastern tunneled connection with the M2 at Terrys Creek and a 2 km western tunneled connection with the M2 near Beecroft Road.
- The southern interchange (with the M2) would directly connect the new National Highway link with the M2 to and from both the east and the west. Connections with roads to and from the south, such as Lane Cove Road and Pennant Hills Road, would be via the M2.
- The northern interchange (at Wahroonga) would directly connect the new link with both the F3 and the Pacific Highway /Pennant Hills Road.
- Options for these interchanges are still being investigated.
- The tunnels would pass under Devlins Creek, Lane Cove River and Copes Creek.

Features of the Type A Red option from either side of the M2 Motorway toll plaza at Macquarie Park to the F3 Freeway at Wahroonga

- Approximately 6.5 km of dual two or three-lane tunnels.
- The southern interchange (with the M2) would directly connect the new National Highway link with the M2 to and from both the east and the west. Connections with roads to and from the south, such as Lane Cove Road, would be via the M2, which would need to be widened between Henning Road and Lane Cove Road.
- The northern interchange (at Wahroonga) would directly connect the new link with both the F3 and the Pacific Highway /Pennant Hills Road.
- Options for these interchanges are still being investigated.
- The tunnels would pass under Lane Cove River and Copes Creek.

Project cost and timing

So far, the study’s investigations suggest the capital cost of building the new National Highway link could be up to $2.2 billion in 2003 dollars.

The study team is investigating ways of achieving value for money, including, for example, dual two-lane rather than dual three-lane tunnels.

Construction of a new link is intended to commence in 2007 following the completion of the Western Sydney Orbital, assuming an acceptable link option can be found, all environmental approvals are obtained, and suitable funding is available. Construction would take approximately four years.

Tunnel options and ventilation stacks

All of the feasible Type A options would mostly be in tunnel and would need to be ventilated through ventilation stacks.

The number and potential locations of these stacks would be assessed as part of the detailed investigations and EIS process following a decision on a preferred route.
Preliminary comparison of the corridor Type A options

<table>
<thead>
<tr>
<th>Summary of effects</th>
<th>Purple option</th>
<th>Blue option</th>
<th>Yellow option</th>
<th>Red option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport improvements (based on untolled scenario)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total vehicles per day on the new link (2021)</td>
<td>80-85,000</td>
<td>80-85,000</td>
<td>70-75,000</td>
<td>70-75,000</td>
</tr>
<tr>
<td>Vehicles per day taken off Pennant Hills Road (2021)</td>
<td>35-40,000</td>
<td>35-40,000</td>
<td>about 20,000</td>
<td>about 20,000</td>
</tr>
<tr>
<td>Vehicles per day taken off Pacific Highway (2021)</td>
<td>fewer than 1,000</td>
<td>fewer than 1,000</td>
<td>fewer than 5,000</td>
<td>about 5,000</td>
</tr>
<tr>
<td>Heavy vehicles per day taken off surface routes (2021)</td>
<td>12,000</td>
<td>12,000</td>
<td>7,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Reduction in the number of fatal and serious road crashes per year on arterial roads in the study area (2021)</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Traffic relief on local roads</td>
<td>All four options would provide some traffic relief on local roads.</td>
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<tr>
<td>Public transport opportunities</td>
<td>Improved bus access to railway stations and opportunities to introduce transit lanes etc on Pennant Hills Road.</td>
<td>Improved bus access to railway stations.</td>
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<tr>
<td>Social effects</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Relief from existing community severance</td>
<td>Significant relief along Pennant Hills Road.</td>
<td>Some relief along Pennant Hills Road.</td>
<td></td>
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</tr>
<tr>
<td>Approximate number of properties potentially directly affected on the surface</td>
<td>20-80</td>
<td>50-130</td>
<td>20-100</td>
<td>20-100</td>
</tr>
<tr>
<td>Improvements in amenity and community well-being along Pennant Hills Road</td>
<td>Severance in the vicinity of the Brickyard Pit. Some improvement in noise and air quality.</td>
<td>Most improvement in noise and air quality.</td>
<td>Improvement such as reductions in exhaust emissions and noise.</td>
<td></td>
</tr>
<tr>
<td>Environmental effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impacts on flora and fauna, natural areas, waterways, heritage, air quality and noise and vibration</td>
<td>For all four options, similar minimal impacts from the tunnelled routes once they are in operation. Construction impacts would be minimised through the boring of tunnels. Potential impacts and their mitigation would be defined at the environmental impact assessment stage, but no heritage sites or threatened species would be directly affected by these options.</td>
<td></td>
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<tr>
<td>Economic effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project capital cost (preliminary estimates only)*</td>
<td>$1.6 - 1.8 billion*</td>
<td>$1.7 - 2.2 billion*</td>
<td>$1.5 - 1.8 billion*</td>
<td>$1.5 - 1.8 billion*</td>
</tr>
<tr>
<td>Access to ports and markets</td>
<td>Improved access to western and southern Sydney markets.</td>
<td>Improved access to Port Botany and Sydney Airport.</td>
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</tr>
</tbody>
</table>

* These preliminary cost estimates are in 2003 dollars and based on dual three-lane tunnels. Cost estimates would be less if dual two-lane tunnels were constructed. They also depend on the type of interchange with the F3 at Warringa and at the intersection with the M2 Motorway.

Longer term needs and options

One of the key messages from consultation with the community has been the need to plan, in an integrated way, for Sydney's land use and transportation requirements, particularly as Sydney grows to a predicted 5 million people over the next 20 years.

The Type A corridor options would best meet the objectives of the project. Importantly, a link of this type would provide earlier traffic relief to Pennant Hills Road once it is constructed. Such a link would integrate with existing transport and land-use plans and effectively service long-distance transport needs until at least 2021.

There are significant uncertainties in predicting population growth, employment patterns and transport needs beyond 2021. An assessment of longer-term transport strategies would need to occur in conjunction with other planning processes for the growth of Sydney.
Public displays

Community views will play an important role in the formulation of a preferred route, so we invite and welcome your comments. We would particularly like your comments on the four feasible Type A options.

These options will be on public display and study team members will be available to answer your questions as follows:

<table>
<thead>
<tr>
<th>Locations</th>
<th>Display times and dates</th>
<th>Times study team members will be at the displays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2, Imperial Shopping Centre, 171 Mann Street</td>
<td>3 pm to 7 pm on Thursday 14 August</td>
<td>Thursday 14 August 3 pm to 7 pm</td>
</tr>
<tr>
<td></td>
<td>10 am to 2 pm on Saturday 16 August</td>
<td>Saturday 16 August 10 am to 2 pm</td>
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<tr>
<td>Dural in the mall at Round Corner Village</td>
<td>1 pm to 5 pm on Thursday 14 August</td>
<td>Thursday 14 August 1 pm to 5 pm</td>
</tr>
<tr>
<td></td>
<td>10 am to 2 pm on Saturday 16 August</td>
<td>Saturday 16 August 10 am to 2 pm</td>
</tr>
<tr>
<td>Hornsby</td>
<td>During shopping hours:</td>
<td></td>
</tr>
<tr>
<td>Westfield Hornsby, 236 Pacific Highway</td>
<td>Thursday 14 August to Saturday 16</td>
<td>Thursday 14 August 4 pm to 8 pm</td>
</tr>
<tr>
<td>Level 1, near Florence Street entrance</td>
<td>August 21 August to Saturday 23</td>
<td>Friday 15 August 10 am to 2 pm</td>
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<td></td>
<td>August</td>
<td>Saturday 16 August 10 am to 2 pm</td>
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<tr>
<td></td>
<td>August</td>
<td>Thursday 21 August 4 pm to 8 pm</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>Friday 22 August 10 am to 2 pm</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>Saturday 23 August 10 am to 2 pm</td>
</tr>
<tr>
<td>Carlingford</td>
<td>During shopping hours:</td>
<td></td>
</tr>
<tr>
<td>Carlingford Court, Ground Level</td>
<td>Thursday 14 August to Saturday 16</td>
<td>Thursday 14 August 4 pm to 8 pm</td>
</tr>
<tr>
<td>Carlingford Road entrance</td>
<td>August 21 August to Saturday 23</td>
<td>Friday 15 August 10 am to 2 pm</td>
</tr>
<tr>
<td>Cnr Carlingford and Pennant Hills Roads</td>
<td>August</td>
<td>Saturday 16 August 10 am to 2 pm</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>Thursday 21 August 4 pm to 8 pm</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>Friday 22 August 10 am to 2 pm</td>
</tr>
<tr>
<td></td>
<td>August</td>
<td>Saturday 23 August 10 am to 2 pm</td>
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</tbody>
</table>

Further information and displays may be viewed at the following Council offices from 4 August to 29 August 2003:
- Baulkham Hills Shire Council, 129 Showground Road, Castle Hill
- Blacktown City Council, 62 Flushcombe Road, Blacktown
- Gosford City Council, 49 Mann Street, Gosford
- Hornsby Shire Council, 296 Pacific Highway, Hornsby
- Ku-ring-gai Municipal Council, 818 Pacific Highway, Gordon
- Parramatta City Council Library, Civic Place, Parramatta
- Ryde City Council Library, Devlin Street, Ryde

Information may also be viewed from 4 August to 29 August at Council libraries within the study area. Please see the study website http://commcons.skm.com.au/f3tosydneyorbital for library locations.

Opportunities for further public feedback will continue as the project is further developed. If it were decided a Type A option should proceed to the next stage, the project would be subject to formal public and government scrutiny through an environmental impact assessment and formal approval process.

How to comment or get more information

- Call the study information line (free call): 1800 550 050
- Email a comment to f3tosydneyorbital@skm.com.au
- Post or fax a more detailed written submission to:
  - Jo Moss, Community Liaison Manager
  - F3 to Sydney Orbital Link Study
  - Reply Paid 164, St Leonards NSW 1590
  - Fax: 02 9928 2502 (marked to attention of Jo Moss)

The closing date for public comment on the feasible options is Friday 12 September 2003.

Privacy statement: All information in representations we receive may be published in subsequent assessment documents. If you indicate at the time you supply any information that should be kept confidential, DOTARS and the RTA will attempt to keep it confidential, but may be legally obliged to release the information (for example, under Freedom of Information legislation or under a subpoena or statutory instrument).