

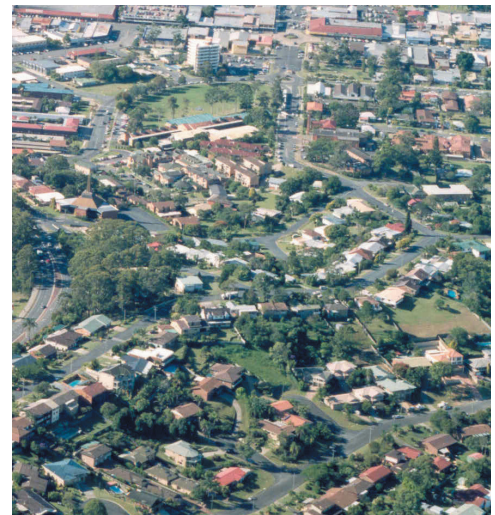


Department of
Infrastructure, Planning and Natural Resources



Coffs Harbour Highway Planning Strategy

PREFERRED OPTION REPORT
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***Coffs Harbour Highway Planning Strategy
Preferred Option Report***

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Executive Summary

Background

The Coffs Harbour Highway Planning Strategy (CHHPS) is being developed to address the need to upgrade the Pacific Highway between Sapphire and Woolgoolga while planning for future traffic needs within the Coffs Harbour area. The CHHPS is being developed by the Roads and Traffic Authority (RTA) in association with the NSW Department for Infrastructure Planning and Natural Resources (DIPNR).

Corridor options

Since planning for the Strategy began in September 2001, a wide range of potential road corridors and route options has been investigated. These have included options developed by the project team and options put forward by Coffs Harbour City Council (CHCC) and the community.

The options investigated for the Strategy fall within three broad strategic corridors:

- **Far Western Bypass.** A bypass of Coffs Harbour and Woolgoolga through the Orara Valley from Englands Road south of Coffs Harbour to Halfway Creek or Grafton. The investigation of the feasibility of this strategic option concluded that it could not be justified within the foreseeable planning future due to the relatively low traffic volumes predicted to use it, the very high cost and the lack of staging opportunities.
- **CHCC Preferred Corridor.** Options within a corridor adopted by CHCC in late 2003 as its preferred option for a bypass of Coffs Harbour and Woolgoolga. The feasibility assessment of this corridor found that options within the corridor, including the Coastal Ridge Way / Option A, are not viable as they present significant engineering challenges, provide poor functional performance, are high cost and provide poor value for money. The route options in this corridor also have very significant biophysical impacts on native flora and fauna and a landscape of Aboriginal significance.
- **Coastal Corridor.** Options along the coastal plain between Englands Road south of Coffs Harbour and Arrawarra Creek north of Woolgoolga, with a future extension to Halfway Creek.

Within the CHCC Preferred and Coastal Corridors there are several potential route options and they were presented in different public information releases and detailed in technical investigation documents prepared by the project team. The key documents include the *Route Options Development Report* (Dec 2002), *Review of the Coastal Ridge Way Proposal* (Feb 2004), *Supplementary Options Report* (Feb 2004), *Strategy Report* (Feb 2004) and *Coffs Harbour City Council Preferred Corridor Feasibility Assessment* (June 2004).

The assessment of the three broad strategic corridor options found that the **Coastal Corridor** was the most feasible corridor option because:

- it would have good functional performance (provide substantial road safety improvements and travel time savings) while providing opportunities to separate through and local traffic
- it would provide the best balance between functional, environmental, social and economic factors
- it would have moderate and manageable biophysical impacts
- it would have relatively minor and manageable heritage impacts
- it would be lower cost (\$710M to \$900M) than the other corridor options
- it would give the best value for money and have fair economic performance (BCR 1.4 to 1.8)

- it would provide good construction staging opportunities that could be provided within funding program limitations

The investigations also found that the Coastal Corridor would have more potential social and community impacts when compared to other corridors due to its proximity to the main urban areas of the City. However, based on experience with many comparable new highway situations, it is evident that with the application of contemporary urban design principles and incorporation of best practice mitigation measures, the potential social and community impacts can be effectively managed to achieve a high quality project outcome. In the case of new urban release areas such as North Boambee, there is an opportunity to modify and protect adjacent land use to encourage compatible urban and transport developments.

Coastal Corridor options

The Coastal Corridor can be divided into a number of sections for descriptive and assessment purposes. They include:

- the southern (Coffs Harbour) section from Englands Road to Korora
- the upgrade section from Korora to south Woolgoolga
- the Woolgoolga deviation from south Woolgoolga to Arrawarra Creek

The distinguishing features of these sections are summarised below.

Coffs Harbour Section

Route options within the Inner Bypass corridor around the main Coffs Harbour urban area from Englands Road to Korora were identified and evaluated against the option of upgrading along the existing highway to urban motorway standards. Details of these alternatives were presented in the *Strategy Report (Feb 2004)*. In the February 2004 information release (Community Update No4), the options were displayed and it was announced that the upgrade of the existing highway upgrade was not acceptable due to its social and economic impacts on Coffs Harbour.

A Value Management Workshop was held on 2 and 3 August 2004 to consider the short listed Inner Bypass options IS1 / IS2 and IN1 / IN2. The workshop participants represented diverse community areas and organisations, Coffs Harbour City Council, government agencies and members of the project team. The workshop thoroughly reviewed and analysed the short listed options using the 'triple bottom line' evaluation process to assess their functional, socio-economic and environmental performance (refer Appendix C *Inner Bypass Corridor, Route Evaluation Workshop*, ACVM Aug 2004). The workshop recommended a combination of Options IS2 and IN2 as the preferred deviation route for the Strategy.

Following the Value Management Workshop, senior representatives of the RTA, regional representatives of DIPNR and the project team further reviewed the work undertaken to date and recommended a preferred option for the Strategy. The review was based on the technical investigations undertaken, the outcome of the value management workshops and the results of the community consultation activities

Following consideration of the likely extent of development in the North Boambee Valley and the West Coffs Harbour area before the anticipated construction of the bypass (10+ years), the review recommend IS1 over IS2 for the southern section of the corridor as:

- transport benefits of both options are similar
- overall potential impacts of IS2 on likely future land use are similar to IS2 and can be mitigated by replanning the development of the North Boambee Valley
- given the conceptual design information available, IS1 has the potential to be refined to further reduce potential noise, visual and other environmental impacts

- the opportunity exists to replan the North Boambee Valley and the West Coffs harbour areas to encourage compatibility between the development of these areas and the road proposal
- IS1 has lower engineering risks with greater flexibility and certainty (tunnel through Roberts Hill Ridge is not required)
- IS1 is \$65M less expensive than IS2 and provides significantly better value for money
- ongoing operational cost of tunnel (Indicative estimates suggest this could be in excess of \$1M per year to cover items including energy use, maintenance of lighting / ventilation / messaging / fire systems, operation team labour and a sinking fund for an assumed 15 year replacement of mechanical and electrical equipment / systems).

Although it is up to \$45M more expensive than IN1, the review recommended IN2 for the northern section of the corridor as it:

- has much less impact on existing and proposed development in the West Coffs Harbour area
- makes better use of the ridgelines to reduce potential acoustic and visual impacts on adjacent existing and proposed urban areas
- provides better overall socio-economic performance
- results in less severance of existing and future communities
- is likely to have a higher degree of community acceptance

Accordingly, the recommended preferred route for the southern (Coffs Harbour) section is the combined **Option IS1 / IN2**.

Korora to south Woolgoolga

This section extends from the northern end of the Coffs Harbour section at Korora through to the southern end of the preferred Woolgoolga deviation (see below). As noted in Community Update No4 released in February 2004, the only realistic and feasible option for this section of the Strategy is an upgrade to dual carriageway along the existing corridor. Preliminary concept plans for this section were included in the *Route Options Development Report (Dec 2002)* and Community Update No3. Specifically, the preferred upgrade concept is based on a dual carriageway with grade separated interchanges at strategic locations along the route to cater for future local travel needs. An important feature of this concept would be provision for a comprehensive local service road system that facilitates substantial separation of through and local traffic. The service road system would need to be carefully planned as part of the subsequent project development phase and it is envisaged this will include an ultimate scheme or master plan for the highway development as well as interim staging opportunities that address funding and traffic needs.

Woolgoolga section

Following display of the route options for the Sapphire to Woolgoolga section of the highway in December 2002 (*Route Options Development Report*), a value management workshop held in April 2003 recommended that Options A and B did not warrant further assessment and Options C and D should go forward with further consideration of socio-economic and environmental issues.

In response to a request from CHCC following the workshop, the project team investigated additional options to the west of Woolgoolga. In February 2004 these new Options C1 and E were displayed (refer *Supplementary Options Report (Feb 2004)*) and it was also announced that Option D was not acceptable due to its social and economic impacts on Woolgoolga.

An additional value management workshop was held on 4 August 2004 to assess the merits of the remaining route options for the Woolgoolga deviation section. The majority of the workshop participants recommended Option E as the preferred option as it was considered to:

- be likely to have a higher degree of community acceptance
- deliver the best overall socio-economic outcome

- better provide for future urban growth and provide greater flexibility for future land use planning decisions
- result in less severance of existing and future communities
- provide safety and noise improvements for Mullaway and Safety Beach

Although it is \$15M more expensive, the review undertaken in August 2004 recommended Option E as it:

- provides the best overall socio-economic benefits
- better provides for future urban growth and with greater flexibility in planning decisions
- results in less severance of existing and future communities
- provides safety and amenity (including noise) benefits for Mullaway and Safety Beach
- is likely to have a higher degree of community acceptance

Accordingly, **Option E** is recommended preferred route for this section of the Strategy.

Recommended highway route

The recommended route option for the Coffs Harbour Highway Planning Strategy is a Coastal Route that combines the Inner Bypass options for Coffs Harbour (ie. combined options IS1 and IN2), upgrading of the existing highway from Korora to South Woolgoolga to dual carriageway and the Option E bypass of Woolgoolga.

Recommendation of this route is based on the technical investigations undertaken, the recommendations from the value management workshops, assessment of the feedback from the community consultation and the review of the work undertaken by the project team. In summary, the preferred coastal option is selected because it would:

- effectively meet the objectives of the Pacific Highway Upgrade Program including substantial road safety improvements and travel time savings for both through and local traffic
- have good functional performance while providing opportunities to separate through and local traffic
- provide acceptable value for money when implemented on a staged basis
- have good construction staging opportunities that could be provided within funding program limitations
- have minor biophysical impacts compared to other broad corridors. These impacts are likely to be at a level that can be effectively managed
- have minor heritage impacts compared to other broad corridors.
- could be designed to minimise severance of existing or future communities
- provide limited but acceptable physical separation from existing and proposed residential areas so that with sensitive design, acceptable visual and traffic noise control measures could be achieved
- allow for urban growth with flexibility for future land use planning decisions and compatibility with transport requirements
- provide opportunities to reduce social and community impacts through good urban design, the incorporation of mitigation measures and modifications to adjacent existing and proposed land use controls to encourage compatible development

Strategy implementation

The main actions required to implement the recommended option are summarised below.

The proposed next steps for the implementation of the *Southern (Coffs Harbour) section* of Strategy are to:

- undertake planning action to reserve land for the preferred option
- refine the concept design for the preferred option to further reduce impacts and identify future road reserve boundaries
- prepare a package of works to manage the existing highway through Coffs Harbour until the preferred option is constructed

CHCC, with assistance from RTA and DIPNR, will need to review planning of the North Boambee Valley and West Coffs Harbour Area to encourage compatibility between the development of these areas and the road proposal.

The proposed next steps for the implementation of the *Northern (Sapphire to Woolgoolga) section* of Strategy are to:

- refine the concept design for preferred option
- prepare an Environmental Impact Assessment (EIA) prior to seeking planning approval to construct the project