



COFFS HARBOUR HIGHWAY PLANNING

Developing a Planning Strategy
for the Pacific Highway
Coffs Harbour

INFORMATION SHEET NO 2

March 2002

UPGRADING THE PACIFIC HIGHWAY

DEVELOPING A PLANNING STRATEGY FOR THE PACIFIC HIGHWAY IN THE COFFS HARBOUR AREA

Over the past six months, work has been underway on a strategy for the Pacific Highway in the Coffs Harbour area. The strategy covers an area from south of Sawtell to north of Woolgoolga and as far west as Coramba. This area has two components. To the north, from Sapphire to north of Woolgoolga, there is a short-term plan to upgrade the highway to dual carriageways. To the south, there has been an assessment of the feasibility of a long-term proposal to bypass Coffs Harbour. A number of community activities have taken place so far and valuable feedback has been obtained.

The steering committee managing the development of the strategy is made up of representatives of PlanningNSW, Coffs Harbour City Council and the Roads and Traffic Authority (RTA). The committee is working through all issues and concerns with the community to reach a considered planning outcome for the Pacific Highway through the Coffs Harbour local government area (LGA).

Identifying corridor options for the northern section and selecting the most suitable bypass corridor(s) in the south was not expected to be finalised until April/May 2002 when the **draft Planning Strategy** was to be released. However, in response to community feedback, investigations have been intensified to provide this information sooner.

The Coffs Harbour Planning Strategy is funded by the NSW State Government under its \$1.6 billion commitment to the Pacific Highway Upgrading Program. The program aims to upgrade single lane sections to dual carriageways, and remove accident blackspots to improve road safety and travel conditions.

WHAT IS THIS INFORMATION SHEET ABOUT?

The purpose of this information sheet is to update the public on the main issues and concerns raised in community forums and to announce the findings of investigations carried out since the launch of the planning strategy in September last year.

In response to community comments, upgrading the existing highway will now be examined as an alternative option to a bypass of Coffs Harbour.

Bypass options have now been reduced from four to one: the *inner corridor* is the only bypass option suitable for further consideration. How this decision was reached is outlined in the information sheet.

A detailed comparison will now commence on the two long-term options for the southern section: the existing highway and the *inner corridor*.

The information sheet also provides:

- Descriptions of initial corridor options identified

for the Sapphire to Woolgoolga section.

- Reasons for rejecting the far-western bypass option through the Orara Valley.
- An outline of the need to refine corridor boundaries in consultation with the community.
- What investigations will be carried out to assess the options of upgrading the existing highway through Coffs Harbour.
- Information on property acquisition processes to apply when a final route is determined.
- A flowchart showing the accelerated strategy planning process and what happens next.
- Details of public meetings and how you can provide input into further development of the strategy.

HOW HAS THE COMMUNITY BEEN INVOLVED?

An information sheet, a summary brochure and discussion paper were widely distributed in September last year. Seven open information sessions were held around Coffs Harbour during October and November. Over 900 people attended these sessions and were invited to register on the mailing list and provide input into the planning strategy by completing comment forms or sending written submissions. Other activities included:

- Public displays of the corridor options at six locations over a period of three months.
- Receipt of 365 comment forms and 128 written submissions (including several petitions).
- Numerous phone calls and web site hits.

The majority of written submissions and comment forms addressed the southern section of the strategy area. Understandably, much community concern focused on the potential impact on properties of the initial three bypass corridors. Community submissions also questioned whether a long-term western bypass of Coffs Harbour was needed at all and whether an upgrade of the existing highway could not serve the same purpose. Some submissions supported a far-

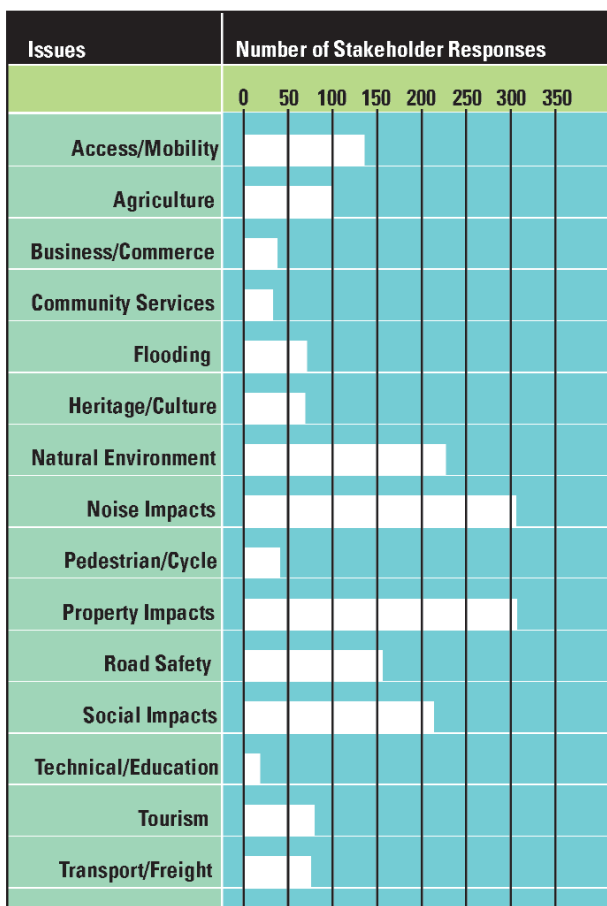


Open information session at Woolgoolga (October 2001)

western bypass running through Coramba and the Orara Valley as far as Halfway Creek or Grafton. Further work has investigated the feasibility of this option (the *far-western option*).

Key issues raised by the community are shown graphically in Figure 1. They include:

- property
- noise
- natural environment
- social impacts
- road safety
- access/mobility



There was strong support from the community, businesses and other groups to complete the assessment of the three bypass corridors as soon as possible to reduce the amount of potentially affected property.

In November 2001, two Community Focus Groups (CFGs) were formed in the northern section, with one group focusing on the Sapphire/Moonee area and the other on Woolgoolga. In response to requests from people in the southern section, a CFG was also formed in January 2002 to consider the corridor options for the Coffs Harbour area. An independent panel selected group members based on their location, interests and expertise.

PLANNING CONTEXT

The priorities for improving the Pacific Highway are different for the northern and southern sections. The NSW Government is committed to upgrading all of the Pacific Highway between Hexham and the Queensland Border to dual carriageway standard. The existing single carriageway section between Sapphire and Woolgoolga is recognised as a priority and will proceed to environmental impact assessment once a preferred route is identified.

The southern section between Sawtell and Sapphire has been extensively upgraded and is already dual carriageways. Together with recent and proposed local road improvements on the eastern and western distributors, the capacity of the highway through the main Coffs Harbour area is likely to be adequate for many years. However, given the high population growth rate and demand for residential land, a strategic approach to land-use and transport planning is essential to ensure that:

- Long-term improvements can be carried out through the Coffs Harbour urban area.
- The short-term Sapphire to Woolgoolga project in the northern section is compatible with these future improvements.

On completion of the planning strategy, the steering committee will decide whether a long-term bypass of Coffs Harbour is justified and desirable or whether it is preferable to adapt the existing highway and local road system to meet long term traffic demands. Should the final strategy conclude that a bypass is the appropriate solution, reservation of land for the future highway would need to proceed without delay to prevent urban growth precluding this opportunity.

The **final Planning Strategy** will also include the preferred route for the upgrading of the highway between Sapphire and north of Woolgoolga.

Figure 1 Community Issues

NORTHERN SECTION – SAPPHIRE TO WOOLGOOLGA

Investigations carried out so far

A road corridor is a broad band of land within which a number of highway routes are possible. Once a corridor is defined, a number of possible routes can then be established within this area. Preliminary technical investigations in the northern section of the strategy area have been focused on identification of initial corridor options.

Identification of these corridors has relied on a range of data sources and local knowledge provided by the community. The CFG members provided feedback on outcomes they would like the project to achieve. These covered road safety, environmental protection, cost and road standard.

Preliminary investigations were carried out into current and proposed urban development, topographical and geotechnical aspects, land-use and other environmental planning issues, heritage, archaeology and flora and fauna. Results from these investigations, in combination with the information from the CFG, have been consolidated and incorporated into 'constraints' maps.

Using these maps, corridors that are suitable from an engineering and construction point of view were then able to be identified. Each corridor will have some degree of impact on property, people and the natural and built environment. The corridor that is ultimately selected will represent compromises between minimising the potential impact on people's lifestyles, homes and properties, and on flora and fauna, water quality and soils, while still meeting acceptable engineering design standards and providing 'value for money' to the wider community.

Figure 2 shows the land-use planning constraints taken into consideration and the resulting corridors.

Corridor options

The corridors identified in the Sapphire to Woolgoolga section are also illustrated over an aerial photograph in Figure 3. Four corridor options have been identified. They provide for options from north of Moonee that variously bypass some or all of the more densely developed urban areas including Woolgoolga, as well as major upgrading of the existing highway along its full length. The bypass corridor options are shown as broad bands ranging in width from 200m to 500m. Within these broad corridors, a number of routes may be identified and refined at the next stage of the strategy process.

The three bypass corridors options are:

- Option A – A community-raised option (coloured orange on the map) to the far-west from Skinners Creek to Arrawarra running through State Forests, with minimal impact on private property.
- Option B – A corridor (coloured blue) that starts near the Gun Club just north of Smiths Road and rejoins the highway further north near Mullaway. The aim of this corridor is to provide for a route that could alleviate the current noise and access issues for coastal settlements including Emerald Heights and Sandy Beach.
- Option C – A close bypass of Woolgoolga that leaves the highway approximately 1km south of Woolgoolga (just north of Graham Drive near the entrance to the caravan park) and rejoins the highway near the Safety Beach Road intersection. This corridor, highlighted in red in Figure 3, maximises use of the existing highway with a current 100km/h speed limit.

The fourth option is:

Option D – A major upgrade of the whole length of the existing highway. It would include revised access arrangements with the likely provision of interchanges and would result in minimal impact on properties, as the current road reserve is sufficient for a second carriageway over much of the length.

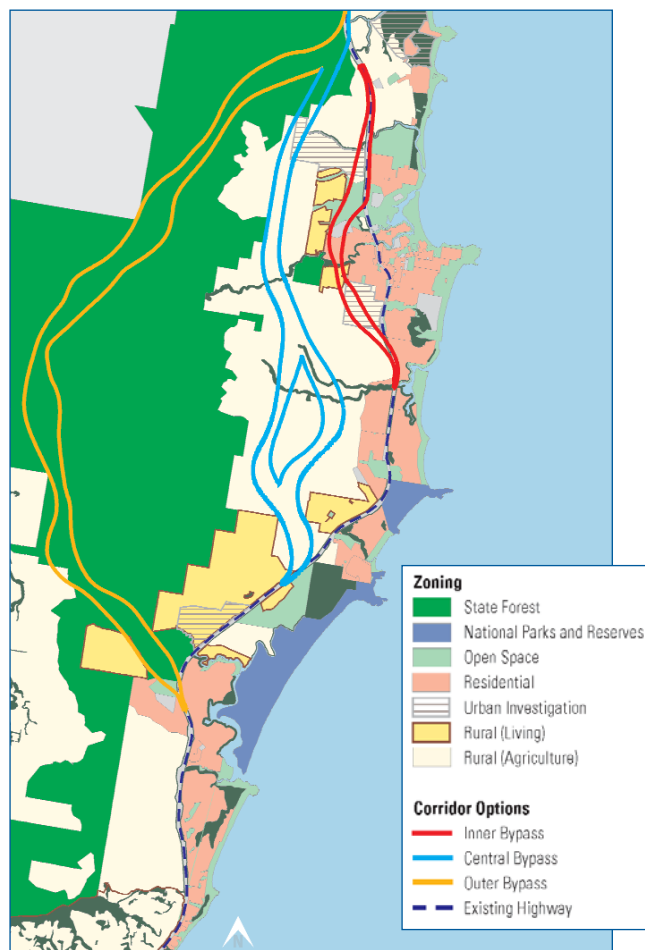


Figure 2 Land-Use Planning Constraints

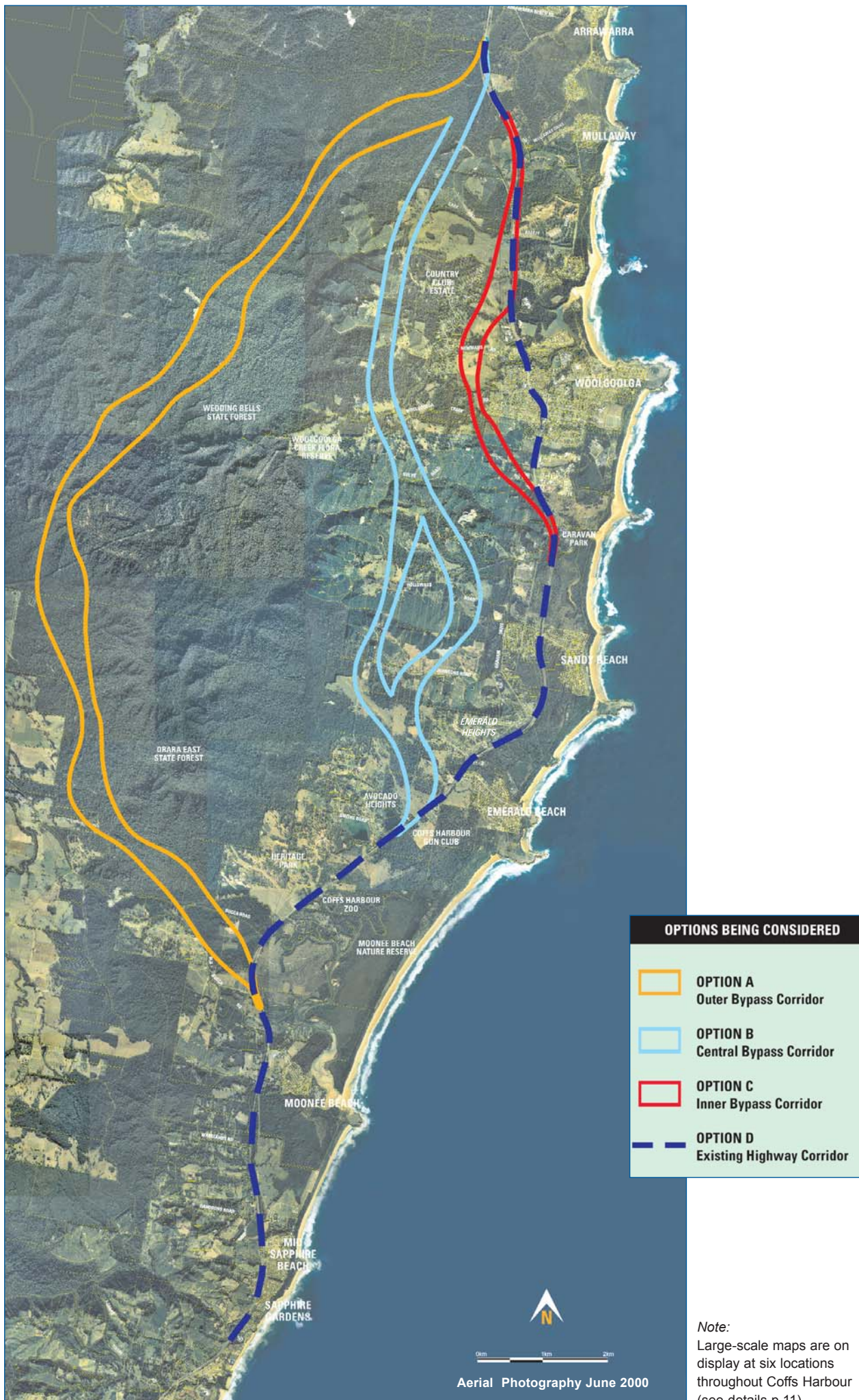


Figure 3 Sapphire to Woolgoolga Corridor Options

SOUTHERN SECTION – SAWTELL TO SAPPHIRE/MOONEE

What corridor options have been considered?

When the discussion paper was released in September 2001, three broad bypass corridors and the existing highway were identified as possible long-term options for the future Pacific Highway through Coffs Harbour. The three bypass corridors represented the range of realistic engineering options initially identified by the study team. In response to public submissions, a far-western bypass running through the Orara Valley to Halfway Creek or Grafton has been investigated.

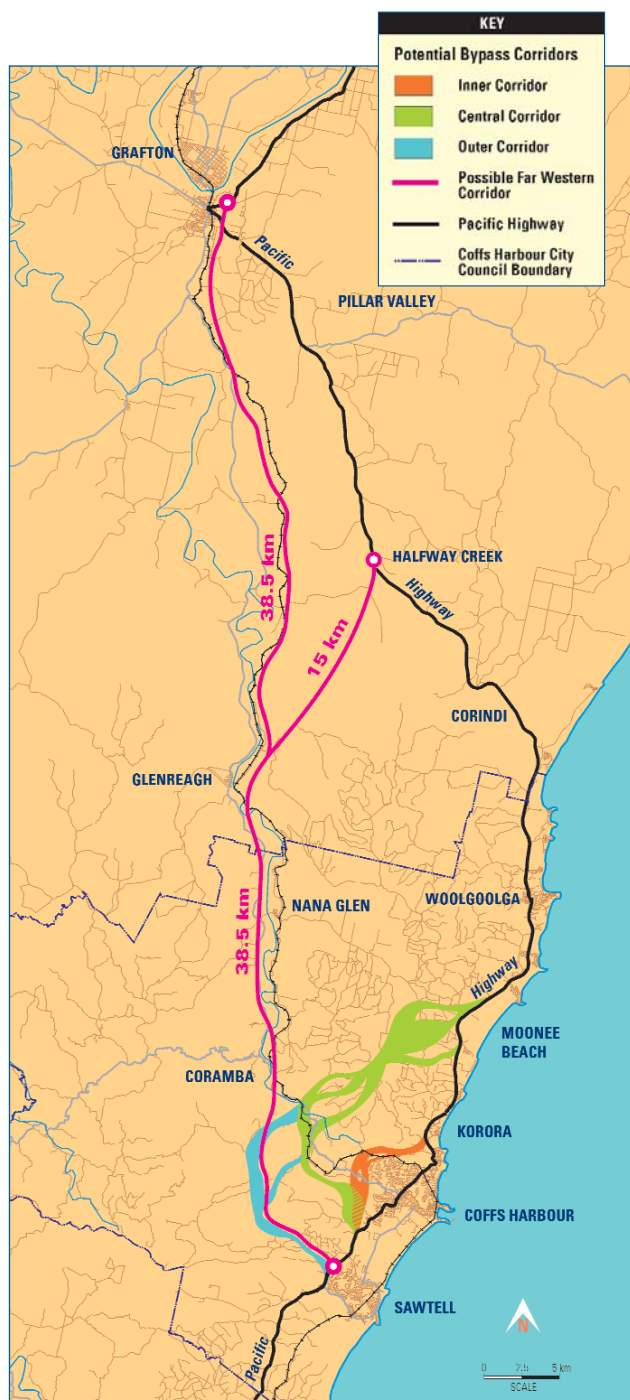


Figure 4 Bypass Corridor Options (Southern Section)

Figure 4 illustrates the comparative scale of the four bypass corridor options.

Investigations into the long-term existing highway upgrade option will be conducted over the next few months and will be reported in the **draft Planning Strategy** (refer p.10).

Investigations carried out so far

Investigations in the southern section of the strategy area covered: design options; preliminary cost estimates; traffic modelling; road user cost benefit analysis; biodiversity conservation and land-use planning issues.

A summary of the findings follows with more detailed working papers available on the web site and at a number of locations throughout Coffs Harbour (see box for details).

TECHNICAL WORKING PAPERS

The three technical papers are:

- Working Paper No 1: Preliminary Concept Design Report
- Working Paper No 2: Traffic and Economics Report
- Working Paper No 3: Environmental Planning Overview Report

They are available on the web site www.rta.nsw.gov.au/pacific.htm and for viewing in hard copy at the following locations:

- Coffs Harbour City Council
- RTA Motor Registry
- Coffs Harbour, Toormina and Woolgoolga Public Libraries
- PlanningNSW, Grafton
- RTA Pacific Highway Office, Grafton

Traffic modelling

Using Coffs Harbour City Council's established computer-based model, traffic modelling was undertaken to assess the likely changes in traffic movements associated with the inner, central and outer corridor options. The model takes account of population projections and Council's strategic land-use plans when assessing proposed changes to the road network. In this case, the model assumes that a number of proposed road works including the Stadium Drive link, North Boambee Valley links, Hogbin Drive widening and extension, and Mastracolas Road and extension have been completed by 2021.

Forecast 2021 average week-day traffic volumes*

Expected traffic volumes	Inner corridor	Central corridor	Outer corridor	Far-western corridor
South of Coramba Road	9,100-11,700	2,500-3,400	1,900-2,600	3,000-4,000
North of Coramba Road	6,600-9,500	1,200-1,800	1,200-1,800	2,000-3,000

* Refer to Working Paper No 2: Traffic and Economics

Two time periods were modelled – the present (2001) as a base case and a 2021 future year scenario. It was assumed that each of the bypass corridors would have three interchanges – one at the northern and southern tie-ins with the existing highway and one in the vicinity of Coramba Road.

The ranges of expected traffic volumes to the south and north of Coramba Road for each bypass corridor in 2021 are shown in the table above. The table indicates that, generally, the further west the corridor, the less traffic it would attract. This is consistent with surveys that confirm a large proportion of highway traffic is locally generated. **The inner corridor attracts significantly more traffic as it provides for more use by local traffic.**

More information is available in the Working Paper No 2: Traffic and Economics.

Project cost

For cost estimating purposes, preliminary designs for two routes within each of the three original bypass corridors were developed. This allowed initial costing of: investigation and design requirements; expected extent of land acquisition; public utility alterations (power, water etc); construction; and environmental protection works.

Cost estimates for the far-western corridor were determined using average per kilometre rates for major highway construction. Given the two alternative connection points for this corridor with the existing highway, a wide range of costs resulted.

Figure 5 compares the length, cost and construction time of the four bypass corridors.

More information is available in Working Paper No 1: Preliminary Concept Design and Working Paper No 2: Traffic and Economics.

Economics

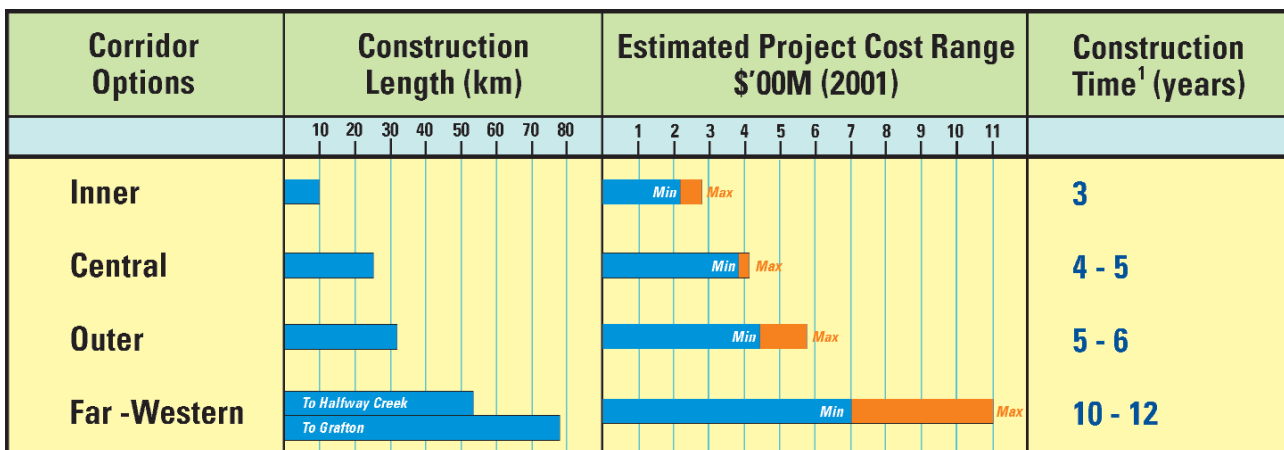
An important part of any assessment of major transport infrastructure proposals is cost benefit analysis (CBA). In this case, total project costs (eg. construction, land acquisition and maintenance) were compared with measurable benefits to road users (eg. savings in accidents, vehicle operating costs and travel time).

The analysis confirmed initial expectations of the steering committee that there is no apparent economic merit of investing in a major bypass for about 20 years or more. **Furthermore, the results indicate that the inner corridor is the only option likely to provide net benefits in the long planning horizon adopted for this investigation.** By contrast, the relatively high costs and small traffic attraction of the central, outer and far-western corridors makes them unattractive economic proposals, even in the very long term.

More information is provided in Working Paper No 2: Traffic and Economics.

Environmental planning

There are some significant land-use planning issues that need to be considered in developing the most suitable corridor for a Coffs Harbour bypass. For example, Council has planned for future urban growth by setting aside areas to accommodate



1. Based on maximum expenditure of \$80 - 90M p.a

Figure 5 Key Features of Bypass Options

future populations. Both the inner and central corridors overlap with part of these areas. The following conflicts have been identified:

- The outer and central corridors affect large areas of agricultural land.
- The *inner corridor* affects some smaller agricultural holdings – predominantly bananas.
- The outer and central corridors cross State Forest and National Park zones.
- Both the *inner* and central corridors affect short and medium-term urban release areas at North Boambee. The *inner corridor* also affects the west Coffs (Coramba Road) urban release area. Council would need to carry out substantial re-planning of urban release areas, land-use plans and strategies.
- The *inner corridor* would potentially affect the proposed 1 hectare rural residential subdivision area in the vicinity of West Korora Road and Bruxner Park Road.
- Both the outer and central corridors would affect the third stage of the Moonee release area (Moonee Release Area Development Control Plan).
- Protective measures such as fauna underpasses, revegetation and provision of compensatory habitat are unlikely to be effective enough to substantially reduce potential impacts of a highway in the central, outer and far-western corridors.
- Given the high level of ecological impact associated with the central, outer and far-western corridors, obtaining consent from the National Parks and Wildlife Service and Environment Australia may be difficult.
- The *inner corridor* has the lowest impact on biodiversity as it passes through largely cleared lands and any adverse effects on wildlife linkages could be mitigated.

More information is available in *Working Paper No 3: Environmental Planning Overview Report*.

Summary

Of the four bypass options, the *inner corridor* is the only one that represents a feasible long-term investment in terms of relative costs and road user benefits. Clearly, the far-western option would not be fundable on absolute cost grounds. In relation to biological diversity, the *inner corridor* is again clearly preferred when compared to the adverse effects associated with the central, outer and far-western corridors.

All options would involve significant property acquisition. The *inner corridor* would impinge more on urban release areas (which would necessitate a review of Council's strategic development plans) while the options further west would impinge more on rural and agricultural areas.

The comparative assessment has concluded that the central, outer and far-western corridors cannot be justified in the adopted planning horizon and, as such, they are not worthy of further investigation. Work on the planning strategy will therefore proceed in refining the boundaries of the *inner corridor*, defining routes within that corridor and comparing these with various upgrading scenarios for the existing highway.

Biological diversity

Biological diversity (also known as biodiversity) is a broad term referring to the variety of life forms to be found in any particular area. To predict the biological significance of each corridor option, biodiversity characteristics were classified into three broad habitat types:

- Known habitat for vulnerable/endangered species.
- Potential habitat for vulnerable/endangered species.
- Areas without formal conservation significance.

In addition, wildlife linkages were identified using the *Coffs Harbour Koala Plan of Management* and State Forests and National Parks and Wildlife Service vegetation mapping. These attributes were mapped to indicate the biodiversity constraints on the inner, central and outer corridors. Because similar data was not available for the far-western corridor, a different method was used based on land uses, wildlife linkages and the crossing of watercourses.

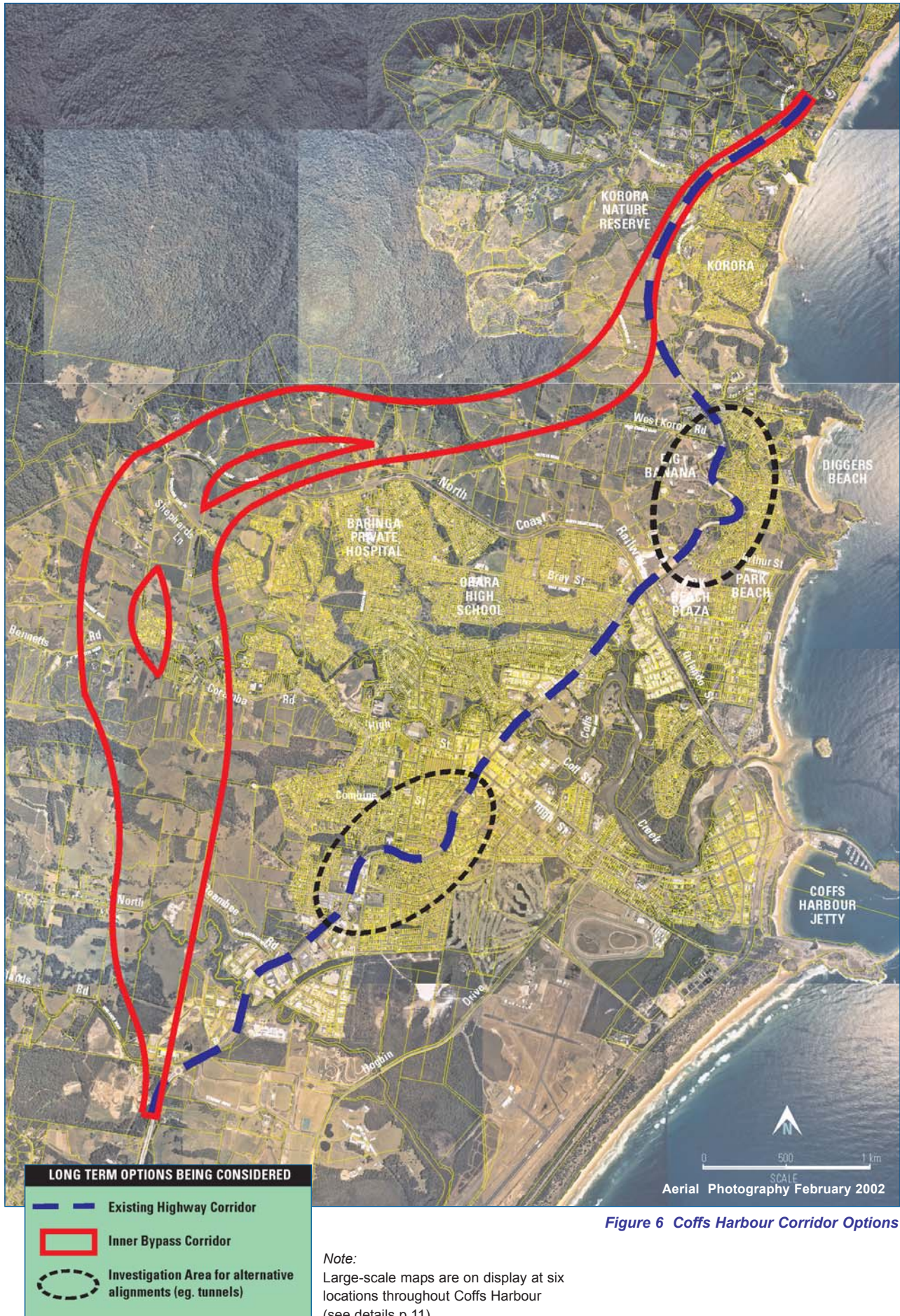
The following conclusions can be drawn:

- The far-western, outer and central corridors are severely constrained in terms of known and potential habitat for threatened species and severance of numerous major and lesser wildlife linkages.

RESPONSES TO SUBMISSIONS

Need for inner corridor refinement

As a result of community submissions and urban development that has occurred since the initial investigations by the steering committee, the boundaries of the *inner corridor* need to be revised. This will be a first step in developing specific route options within the corridor. New aerial photography was flown on 10 February 2002 and the *inner*



Aerial Photography February 2002

corridor is shown over this photography in Figure 6. Work will now commence with the Coffs Harbour CFG and the community to refine this corridor. The refined corridor will then be subject to various detailed investigations (eg. geotechnical, land-use, heritage, biological, social, economic) to identify and finalise route options.

Upgrading the existing highway

Upgrading of the existing highway in the main Coffs Harbour area as a preferred long-term strategy has attracted strong support within sections of the community since the planning strategy was announced last September. Consequently, the steering committee will now be considering future highway upgrading scenarios and comparing them with route options within the *inner corridor*.

Activities will include traffic assessments, developing project concepts in conjunction with the Coffs Harbour CFG, cost estimating and investigating key social and environmental implications of each scenario. The scenarios to be investigated are likely to be quite variable and could include:

- Upgrading, with minimal disturbance beyond the current road boundaries.
- Upgrading to six lanes, mainly within the existing road reserve, and introducing traffic management measures such as interchanges and multiple street closures.
- Higher standard roadway throughout, possibly including tunnels and widening of the existing road reserve, to provide for separate through and local traffic lanes.

Property acquisition

The effect of the planning strategy on properties was raised as an issue of concern in many submissions on the discussion paper. Acquisition of properties required as a result of the **final Planning Strategy** will be the responsibility of the RTA and there are a variety of circumstances that apply depending on the stage of planning and the proposed timing of the actual construction work. However, no property acquisition will occur until a preferred route for the future Pacific Highway is decided. More detail of acquisition arrangements, as appropriate to the particular planning stage reached, will be provided in future information releases. In the meantime, the RTA's Land Acquisitions Policy Statement is available on the project web site or a copy can be obtained through the Freecall number (1800 63 63 63).

WHAT HAPPENS NEXT?

The planning process outlined in the September 2001 summary brochure has been modified in response to public requests to more quickly narrow

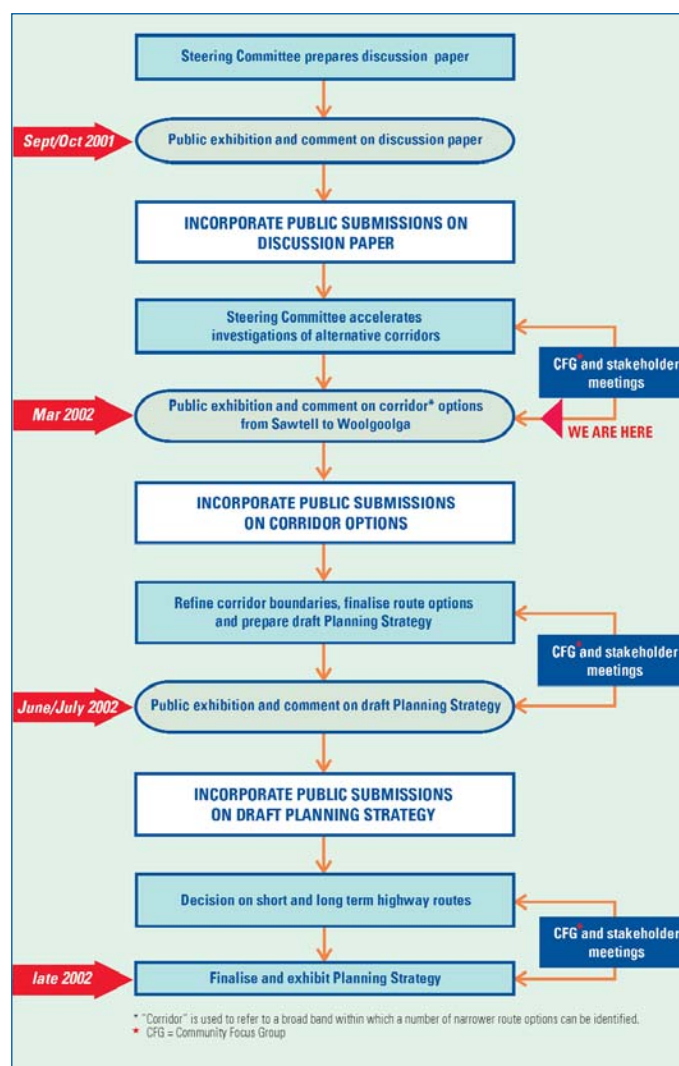


Figure 7 Accelerated Highway Strategy Planning Process

down the amount of property potentially affected by the Coffs Harbour bypass corridors (refer Figure 7 which illustrates the accelerated planning process).

Initially, the aim of the **draft planning strategy** was to reach two milestones – initial field studies and development of preliminary corridor options in the northern section and further assessment of the viability of corridor options in the southern section. The **final Planning Strategy** would only have reached the stage of option planning, with the detailed route planning to follow in the second half of 2002 and into 2003.

However, an additional stage has now been added to the process whereby identified corridors (including the *inner corridor* as the most suitable Coffs Harbour bypass option and the existing highway corridor) between Sawtell and north of Woolgoolga are now on display. Following consideration of public submissions on the corridor options, the **draft Planning Strategy** will be developed to evaluate these corridors and to identify and refine routes within the most suitable corridors. It will also include options for upgrading of the existing highway. The **draft Planning Strategy** is scheduled for release in June/July 2002.

As part of the next stage of planning, corridor boundaries will be refined in consultation with the CFGs and with feedback from public forums. Several field-based investigations will also be required, including flora and fauna surveys, heritage surveys and geotechnical assessment. The latter will involve boreholes and test pits at selected locations along the *inner corridor* using specialist machinery. Property access arrangements will be made with individual owners.

On completion of the **final Planning Strategy** in late 2002, a decision will be reached on whether land for a long-term bypass of Coffs Harbour should be reserved and if so, definition of that route and setting of boundaries will then be progressed. In addition, the preferred route for the northern section (Sapphire to Woolgoolga) will be identified.

WHERE CAN I GET MORE INFORMATION?

You can view displays of the corridor options at six locations throughout Coffs Harbour and Woolgoolga. The displays provide large-scale maps showing property boundaries and giving key road and place names in more detail than can be shown in this information sheet. You are also invited to come along to the informal public forums at any time between the nominated hours. Members of the steering committee and project team will be available at the public forums to answer your questions and discuss details of the strategy. The public forums will run for two consecutive evenings at Coffs Harbour, and one night each at Woolgoolga, Moonee, Upper Orara and Bucca. Detailed technical working papers are also available for perusal at a number of locations (see box on p.6) and can also be accessed at www.rta.nsw.gov.au/pacific.htm on the Internet.

PUBLIC FORUMS

Six informal public forums will be held **between 4pm and 8pm** on Tuesday 26 and Wednesday 27 March 2002. You are welcome to attend at any time between these hours at the following locations:

- **Tuesday 26 March 2002**

Coffs Harbour Community Village, Earl Street, Coffs Harbour
Woolgoolga Bowling Club, Boundary Street, Woolgoolga
Lower Bucca Community Centre, Bucca

- **Wednesday 27 March 2002**

Coffs Harbour Community Village, Earl Street, Coffs Harbour
Moonee Beach Hall, Moonee Beach
Upper Orara Hall, Upper Orara

Displays will commence on **18 March 2002** at:

Coffs Harbour

- City Council (8am-5pm Monday to Friday)
- RTA Motor Registry, 34 Gordon Street, Coffs Harbour (8:30am-5pm Monday to Friday and 9am-12:30pm Saturday)
- Park Beach Plaza (normal trading hours)
- The Palms Centre (normal trading hours until 6 May 2002)

Toormina and Woolgoolga

- Public Libraries (9:30am-5pm Monday to Friday and 9:30am-12 noon Saturday)

HOW TO HAVE YOUR SAY

You are invited to make a submission on the corridor options by completing the enclosed comment form or preparing more detailed submissions and forwarding to the contact address on the back page of this information sheet. To make it easier for the study team to analyse the matters raised in your submission:

- List points wherever possible – this makes it clearer and easier to understand.
- Please ensure that your submission is as legible as possible.
- If you have a preference please say so, and give your reasons.

Your views are important to us. If you have any suggestions, proposed modifications or other comments on the corridors, please let us know.

Please send your submission by 10 May 2002.

PACIFIC HIGHWAY UPGRADING PROGRAM

The Pacific Highway Upgrading Program is the single largest construction program in NSW for the last 40 years. Nineteen major and eighteen smaller projects have been opened to traffic. Two major construction projects are presently under way and a further twenty projects are at various stages of planning and development.

The program so far has brought enormous improvements to road conditions and travel times. Notorious black spots have been removed with the completion of the 22km Bulahdelah to Coolongolook Freeway and the Ewingsdale Interchange. Traffic congestion on the highway has been alleviated with the completion of the 14.5km Taree Bypass and the Bray to Arthur Streets upgrade in Coffs Harbour.

As well as boosting tourism and transport efficiency, providing safer and more consistent overtaking opportunities has saved lives and reduced the incidence of road accident trauma.



----- BUILDING A SAFER HIGHWAY -----

For more information contact:

Coffs Harbour Highway Planning Strategy
Reply Paid 478
Coffs Harbour NSW 2450

Phone: 1800 63 63 63 (Freecall)
Fax: (02) 6656 4495

Or go to the RTA web site at
www.rta.nsw.gov.au/pacific.htm