

## 2. Need for the proposal

The Sapphire to Arrawarra section is a key link in the overall framework of the Pacific Highway corridor. The proposed upgrade is required to address the existing and predicted road and traffic deficiencies of this section of highway through the northern part of the Coffs Harbour LGA.

In terms of road and traffic conditions, the Pacific Highway through the study area shows a number of deficiencies. It is currently a two-lane single carriageway, with overtaking opportunities approximately every 5km. There are a number of key intersections with various local roads servicing coastal communities such as Sapphire, Moonee, Emerald Beach, Sandy Beach, Woolgoolga and Arrawarra, several rural residential communities and numerous private accesses. Many of the intersections have poor site lines, inadequate merging lanes and a high accident rate. The highway is the only arterial road available to serve the existing residential settlements located at Sapphire, Moonee, Emerald Beach, Sandy Beach and Mullaway and to provide access to the town centres of Coffs Harbour and Woolgoolga.

Predicted population growth on the northern beaches and the LGA in general will result in increased traffic volumes on the road network. Through traffic is also expected to increase as the Pacific Highway Upgrading Program proceeds to the north and south. Dual carriageways, together with upgraded access arrangements, will improve transport efficiency by reducing travel time and costs, and will significantly reduce the number and severity of accidents.

### 2.1 Implications of doing nothing

The implications of no action or deferral of the Proposal would be ongoing and result in declining traffic and safety conditions and deteriorating community amenity along the existing highway between Sapphire and Arrawarra. Predicted traffic growth would further exacerbate the problems currently experienced with the existing road and traffic environment.

Without major upgrading of the Pacific Highway between Sapphire and Arrawarra, the predicted traffic growth would increasingly expose the deficiencies of the existing road environment over the forecast period. Specific consequences would include:

- the deterioration of traffic conditions to unacceptable levels particularly at holiday times
- a likely increase in vehicle accidents
- a gradual increase in travel times
- increased conflict between local and through traffic
- inconsistency in road standard between the section of highway within the study area and the remainder of the Pacific Highway
- worsening road and traffic conditions with consequent adverse environmental effects such as noise, vibration and community disruption
- increased limitations for pedestrian access and risk of pedestrian accidents due to traffic growth
- exacerbation of community severance as access across the highway deteriorates
- failure to achieve the objectives of planning and transport strategies, in particular the Pacific Highway Upgrading Program

The consequences of no action or deferral of the Proposal would clearly negate or delay fulfillment of the objectives of both the CHHPS and the Pacific Highway Upgrading Program described below and the opportunity to achieve numerous strategic planning, traffic safety and environmental benefits for Coffs Harbour.

## 2.2 Proposal objectives and design principles

### 2.2.1 Pacific Highway upgrade program and project objectives

In January 1996, the NSW and Australian governments announced their joint commitment to a 10-year program to upgrade the Pacific Highway between Hexham and the Queensland border. The Pacific Highway is now an AusLink National Network road. Its upgrading is funded by NSW and Australian governments. The NSW and Australian governments are currently examining how the entire length of the highway can be upgraded to dual carriageway in the next 10 years.

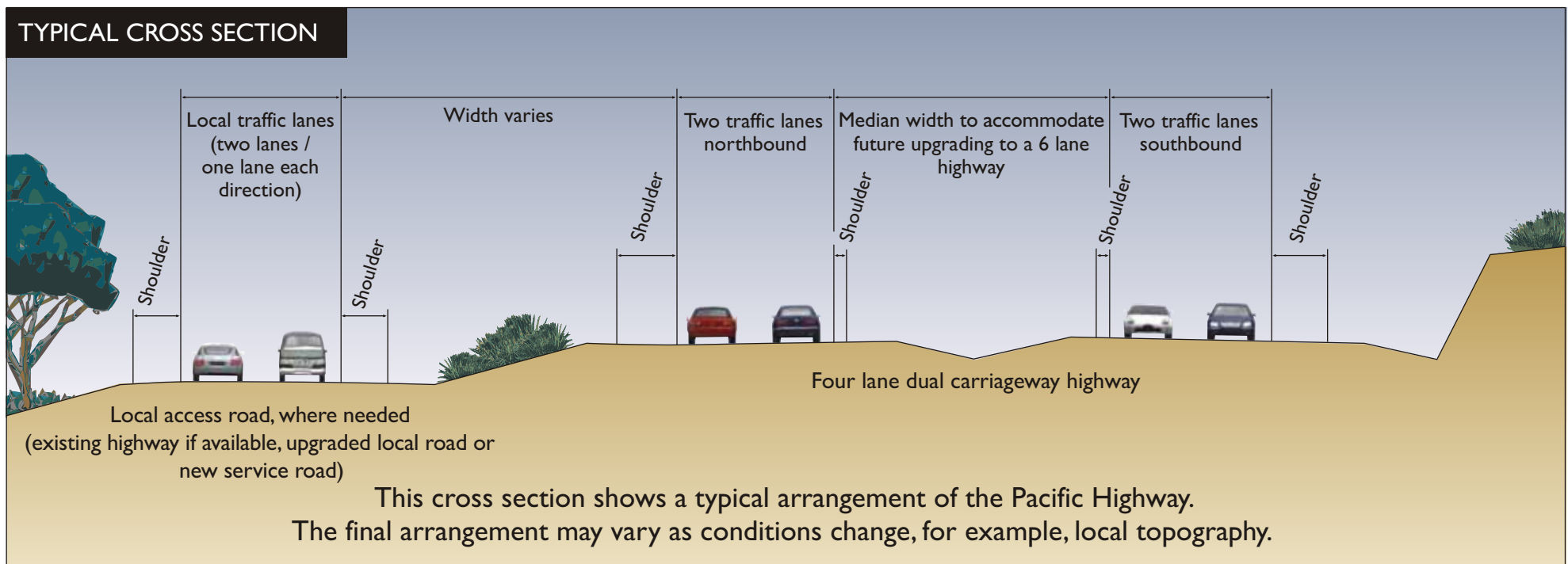
Objectives for the Sapphire to Woolgoolga project are listed in Table 2.1 as they relate to the objectives of the Pacific Highway Upgrade Program.

**Table 2.1 Project objectives**

Pacific Highway Program Objectives	Sapphire to Woolgoolga Preliminary Project Objectives
Significantly reduced road accidents and Injuries	<ul style="list-style-type: none"> <li>A dual carriageway road with potential to reduce crash rates to 15 crashes per 100MVKT over the project length.</li> </ul>
Reduced travel times	<ul style="list-style-type: none"> <li>A design which would enable an ultimate signposted speed limit of 110 km/h to be adopted.</li> <li>Provide flood immunity on at least one carriageway for a 1: 100 year flood event</li> </ul>
Reduced freight transport costs	<ul style="list-style-type: none"> <li>A design that minimises vehicle operating costs.</li> <li>A design that meets or exceeds heavy vehicle requirements, including at intersections where required.</li> </ul>
Develop a route that involves the community and considers their interests	<ul style="list-style-type: none"> <li>Integrate input from local communities into development of the Project through the implementation of a comprehensive program of community consultation and participation</li> <li>A solution at all potential conflict points with local traffic that meets community expectations and maintains local connectivity.</li> </ul>
Provide a route that supports economic development.	<ul style="list-style-type: none"> <li>Provide transport developments that are complementary with land use</li> <li>Consider delay management strategies to minimise disruption to local and through traffic and maintain access to affected properties and land during construction</li> </ul>
Manage the upgrading of the route in accordance with Ecologically Sustainable Development principles.	<ul style="list-style-type: none"> <li>Cumulative impacts assessed and addressed</li> <li>Best environmental practice incorporated.</li> <li>RTA Guidelines for managing environmental issues (biodiversity, noise impacts, water quality, acid sulphate soils, etc) are met.</li> </ul>
Provide the best value for money	<ul style="list-style-type: none"> <li>Maximise the use of the existing road asset where consistent with the Project</li> <li>Ensure the project outcomes achieve value for money</li> </ul>

### 2.2.2 Design principles

The design standard for the upgraded Highway is specified as dual carriageway separated by a 12m median. Each carriageway would comprise two 3.5m lanes, a 2.5m left-hand shoulder and 0.5m right-hand shoulder. A typical cross section of the upgraded highway is shown in Figure 2.1.



NOT TO SCALE

**Figure 2.1**

Typical Cross Section