2 Strategic justification and project need

This chapter provides the context for the project in terms of the Pacific Highway Upgrade Program and strategic planning framework. It also identifies the need for the project and its objectives. The chapter concludes with a statement of strategic need.

Director General's requirements	Where addressed
Strategic Justification and Project - The Environmental Assessment must outline the strategic outcomes for the Pacific Highway Upgrade Program (PHUP), including with respect to...	
– strategic need and justification	Section 2.1.1, Section 2.1.3 and Section 2.4
– the aims and objectives of relevant State planning policies	Section 2.1.2
– the principles of Ecologically Sustainable Development, and	Section 2.4 and Chapter 11
– cumulative and synergistic impacts associated with the Program as a whole.	Section 2.4 Chapter 11
The Environmental Assessment must identify how the project fits within these strategic outcomes and how impacts associated with the project will be considered and managed to achieve acceptable environmental planning outcomes across the PHUP.	Section 2.1.1, Section 2.1.3, Section 2.4 and Chapter 11
Project Justification – the Environmental Assessment must describe ...	
the need for and objectives of the project;	Section 2.2 and Section 2.3 Chapter 3
alternatives considered (including an assessment of the environmental costs and benefits of the project relative to alternatives), and	
provide justification for the preferred project taking into consideration the objects of the *Environmental Planning and Assessment Act 1979*.	Section 2.4 and Chapter 11
The Environmental Assessment must also indicate how the project fits in the context of separate future works to be undertaken for the Wells Crossing to Iluka Road Pacific Highway Upgrade project.	Section 2.1.1, Section 2.4, Chapter 3 and Chapter 11.

2.1 Strategic context

2.1.1 Relationship of the project to the Pacific Highway Upgrade Program

The proposed upgrade is an important component of the wider Pacific Highway Upgrade Program, which is needed to meet the NSW and Australian governments' commitments to upgrade the Pacific Highway between Hexham in NSW and the Queensland border in response to:

- Current constraints on transport infrastructure and the related need to

improve accessibility and transport, both within individual regions and between regions.

- The need to improve the efficiency and integration of transport infrastructure, including improvements in the efficiency and productivity of the freight sector.
- The need to improve road safety.
- Increasing demand for urban development, especially in the relatively narrow coastal strip of NSW.

The projects that make up the Pacific Highway Upgrade Program, including the Glenugie upgrade, are intended to achieve the objectives of improved road safety and reduced travel times.

2.1.2 NSW and Australian strategic planning and policy framework

Nation Building Program

The NSW and Australian governments are providing $3.6 billion as part of the Nation Building Program and Building Australia Fund to continue the upgrade of the Pacific Highway over the next five years to mid 2014. The proposed Gelnugie upgrade (the project) is included in this program.

AusLink White Paper

The AusLink White Paper *Building our National Transport Future* (Australian Government DOTARS 2004) is the Australian government's formal policy statement on land transport and identifies national objectives for the AusLink investment program. The White Paper promotes sustainable national and regional development and connectivity by contributing to the establishment of an integrated national transport network. The Pacific Highway is identified as a key element of the national transport network under the AusLink investment program and is also the key road between Sydney and Brisbane. The Pacific Highway Upgrade Program (including the project) is consistent with the objectives of the AusLink investment program as it aims to improve connectivity within and between communities in the region, increase road safety, and promote sustainable development.

Sydney-Brisbane Corridor Strategy

The *Sydney-Brisbane Corridor Strategy* (DOTARS 2007) has been jointly developed by the Australian Department of Transport and Regional Services, the RTA, the NSW Ministry of Transport, the Queensland Department of Main Roads and Queensland Transport. The strategy identifies the Sydney-Brisbane corridor as one of the busiest links on the Australian transport network. Challenges along the corridor, particularly along the coastal route, include population growth, increased freight movements and rapid growth in passenger and local traffic. The strategy identifies transport deficiencies along the corridor, including safety and amenity issues and increasing congestion. Key objectives of the strategy are to achieve substantial duplication of Pacific Highway in the short-term and complete duplication of the Pacific Highway in the long-term. The Pacific Highway Upgrade Program, including the project, is consistent with these objectives.

NSW State Infrastructure Strategy

The *State Infrastructure Strategy – New South Wales* 2008-09 to 2017-18 (NSW Treasury 2008) provides strategic direction for planning and delivery of infrastructure in NSW in response to population growth. The strategy, which comprises a rolling 10-year plan for infrastructure projects, was first published in 2006 and is updated every two years. The strategy highlights the upgrading of the Pacific Highway as a priority investment, with the upgrading of the Wells Crossing to Iluka Road section of the highway identified as necessary for road safety and transport efficiency. The project is part of the Wells Crossing to Iluka Road Pacific Highway upgrade and has been identified as a key area where safety and transport efficiency improvements are required.

NSW State Plan

The *NSW State Plan: A New Direction for NSW* (NSW Government 2006) identifies priorities for the NSW Government over the next 10 years. The plan provides goals and targets for regional economies, environmental protection, employment and transport, including improving the efficiency and safety of the road network through maintenance and infrastructure development. The Pacific Highway Upgrade Program, including the project, is consistent with these goals and targets. The expected reduction in crashes will help to meet the State Plan objective for road safety of 0.7 fatalities per 100 million vehicle kilometres travelled (MVKT).

Mid North Coast Regional Strategy

The *Mid North Coast Regional Strategy* (DoP 2009) establishes the guiding principles for the planning and management of sustainable growth in the Mid North Coast region. The strategy recognises the Pacific Highway as the primary north-south corridor for inter and intra-regional movements. It identifies the growth pressures that will be faced by the region and the importance of safe and efficient transport connections within and between regions along the Sydney-Brisbane corridor. The Pacific Highway Upgrade Program, including the project, is consistent with the *Mid North Coast Regional Strategy* as it aims to improve traffic safety and efficiency along the Sydney-Brisbane corridor as the regional population grows.

Action for Air

The NSW Government initiative *Action for Air* (EPA 1998) is a 25 year plan to improve air quality. The plan, which was updated in 2006, identifies the reduction of motor vehicle emissions as a priority action and sets specific targets for reducing the per capita vehicle kilometres travelled. To achieve the targets of the plan, the government has developed two key transport initiatives:

- An integrated transport plan.
- An integrated freight management strategy across road, rail and other transport modes.

Although *Action for Air* has a focus on reducing air pollutants in urban environments, measures to improve traffic flow can also have beneficial effects in non-urban environments. Improving transport efficiency can also have the additional benefit of reducing greenhouse gas emissions per vehicle

kilometre travelled. The Pacific Highway Upgrade Program and its component projects, including the project, are consistent with the objectives of *Action for Air*.

2.1.3 Strategic outcomes for the Pacific Highway Upgrade Program

The objectives of the Pacific Highway Upgrade Program are to:

- Significantly reduce road accidents and injuries.
- Reduce travel times.
- Reduce freight transport costs.
- Develop a route that involves the community and considers its interests.
- Provide a route that supports economic development.
- Manage the upgrading of the route in accordance with the principles of Ecologically Sustainable Development.
- Provide the best value for money.

The Glenugie upgrade is consistent with the Pacific Highway Upgrade Program objectives and will contribute to their achievement. This is described further in **Table 2-1**.

2.2 Need for the project

2.2.1 Existing road conditions and safety

The condition of the Pacific Highway between Hexham and the Queensland border varies considerably from a high-standard, four lane divided carriageway to a narrow two-lane road. The highway also varies in its pavement condition and road geometry, both of which affect driver safety and transportation efficiency.

The RTA's target accident rate for the Pacific Highway Upgrade Program is 15 accidents per 100 MVKT. The current accident rate for the section of the Pacific Highway to be upgraded by the project is about 27 accidents per 100 MVKT. This rate is well above the RTA target, and is a key reason why the project is needed. There is also a need to provide a higher standard road to better serve existing and future road users. The project would improve road safety by upgrading a two lane highway with poor horizontal and vertical geometry, narrow shoulders and numerous traffic hazards close to the highway.

2.2.2 Traffic growth and transport efficiency

The RTA publishes Annual Average Daily Traffic (AADT) count data for various Pacific Highway locations. This data set has been used to provide an indication of traffic growth in the study area. Traffic along the section of highway to be upgraded by the project has increased from an average of 6,700 vehicles per day in 2001 to 8,200 vehicles per day in 2009, equating to a 22 per cent increase over this eight year period.

The increase in traffic volumes can be attributed to natural growth in travel demand, improvements to the Pacific Highway, population growth along the eastern seaboard and associated increases in economic activity. With the overall improved efficiency of the Pacific Highway, road freight transport has shifted from the New England Highway to the Pacific Highway. Population growth and increased economic activity in the mid north and north coast regions is anticipated to generate significant increases in travel demand over the next 20 years. Daily traffic volumes along the section of the highway to be upgraded by the project are expected to increase from an existing volume of about 8,200 vehicles per day to about 11,500 vehicles per day in 2022 (based on forecast traffic growth).

While there have been substantial improvements to the Pacific Highway over the last 12 years, travel times in the study area are adversely influenced by sub-standard alignment on the existing highway alignment and limited overtaking opportunities. Two of the objectives of the Pacific Highway Upgrade Program are to reduce travel times and freight transport costs. The project would cater for future traffic growth and contribute to reducing travel times on the Pacific Highway and decreasing freight transport costs.

2.3 Key project objectives

The objectives of the project are consistent with those of the Wells Crossing to Iluka Road Pacific Highway upgrade proposal and overall Pacific Highway Upgrade Program. **Table 2-1** identifies the objectives of the project and how they relate to the overall objectives of the Pacific Highway Upgrade Program.

Table 2-1 Project objectives

Program objectives	Project objectives
Significantly reduce road accidents and injuries	• Provide a dual-carriageway road with a maximum accident rate of 15 per 100 MVKT. • Provide a concept design that achieves a 110 km/h design speed for the motorway style upgrade and a minimum 100 km/h design speed for the likely initial staging. • Provide a concept design that achieves a 100 km/h design speed for the horizontal alignment. • Provide no access points along the length of the project for the full motorway style upgrade and minimise access points for the likely initial staging. • Provide a route that can be upgraded to class M standard in the future.

Program objectives	Project objectives
Reduce travel times	• Provide a route that minimises travel time for Pacific Highway traffic. • Provide intersections designed to at least a Level of Service (LOS) C, 20 years after opening for the 100th highest hourly volume. • Provide a route that minimises user delays from incidents and road closures on the highway. • Provide a route that reduces delays from holiday congestion. • Minimise disruption and delay during construction.
Reduce freight transport costs	• Provide a route that reduces the overall freight transport costs of trucks using the highway. • Provide a route that meets or exceeds B-Double truck requirements.
Develop a route that involves the community and considers their interests	• Develop a project that meets the objectives of the community and stakeholder involvement plan. • Provide a route that minimises physical and traffic impacts such as traffic noise, intrusion, community severance and loss of access. • Provide a route that avoids or minimises impacts on Aboriginal and non-Aboriginal heritage sites. • Provide transport developments that are complementary with land use. • Maintain access to properties and State Forest during construction. • Upgrade and improve the existing highway where required.
Provide a route that supports economic development	• Maintain access for local industries to regional and interstate markets. • Maintain access to local and regional centres of economic importance.
Manage the project in accordance with the principles of Ecologically Sustainable Development	• Minimise the effects on sensitive habitats. • Minimise the effects on native vegetation. • Effectively encapsulate the principles of Ecologically Sustainable Development in the project framework and approach.
Provide the best value for money	• Minimise the project's whole of life costs. • Maximise the use of the existing road reserve for duplicated sections of the project, where possible. • Achieve a benefit-cost ratio of greater than two for the Pacific Highway Upgrade Program. • Ensure that expenditure supports Australian Government, NSW Government and Clarence Valley Council development policies.

2.4 Statement of strategic need

The objectives of the project are consistent with the strategic planning and policy framework, including the goals and targets of key State and Australian government initiatives. The Pacific Highway Upgrade Program is a joint commitment by the NSW and Australian Governments.

The project forms an essential part of the overall upgrade of the Pacific Highway between Hexham and the Queensland border. The projects that make up the Pacific Highway Upgrade Program are intended to achieve the core program objectives of improved road safety and reduced travel times.

The Minister for Planning has declared that segments of the Pacific Highway upgrade, including the Wells Crossing to Iluka Road upgrade, are a project to which Part 3A of the EP&A Act applies (the declared project). As a part of the Wells Crossing to Iluka Road proposal, the Glenugie upgrade forms part of the declared project and is therefore a project to which Part 3A applies. The Wells Crossing to Iluka Road upgrade, including the Glenugie upgrade, has been declared as a critical infrastructure project under Section 75C of the *Environmental Planning and Assessment Act* 1979.

Implementation of the project would provide a higher standard road to better serve existing and future road users, with improvements in road safety and travel efficiency. The project would also add to the safety and travel efficiency benefits provided by other Pacific Highway upgrade projects. It would also generate employment, with benefits to the local and regional economy.

Further justification for the project is provided in Chapter 11. This includes consideration of the principles of Ecologically Sustainable Development, and cumulative and synergistic impacts.