

2. Strategic transport and planning context

Key aspects in relation to transport data and planning requirements have been updated since the release of the Concept Design Report in March 2006. This section provides current information in relation to current and future traffic characteristics and the planning process for the project.

2.1 Existing traffic conditions

Traffic classification counts were undertaken in August 2006 north of Iluka Road and in May 2007 at Tick Gate (12.9 km south of Woodburn) for seven continuous days. **Table 2.1** shows the weekday and 7-day Average Daily Traffic volumes (ADT) and Average Daily Heavy Traffic volumes derived from the results of the surveys. **Table 2.1** also shows the Annual Average Daily Traffic volumes (AADT) which have been estimated by applying traffic growths to existing counts based on the historical growth at the Tick Gate (RTA permanent count station).

In addition to the counts and classification of through traffic on the highway, surveys of three intersections were undertaken for a 12 hour period (7.00 am to 7.00 pm) on a typical weekday to identify peak hour traffic volumes in 2005. The surveys were carried out at the following key intersections:

- Pacific Highway/Jacky Bulbin Road.
- Pacific Highway/Swan Bay New Italy Road.
- Pacific Highway/The Gap Road.

Table 2.1 Existing traffic volumes – 2007

Location along Pacific Highway	Annual Average Daily Traffic Volume – (AADT) (veh/day)	Average Daily Traffic Volume – (ADT) (veh/day)		Average Daily Heavy Traffic Volume (veh/day)*	
		7-day Average	Weekday Average	7-day Average	Weekday Average
North of Iluka Road	8900	6740	6880	1720 (23%)	2040 (30%)
North of The Gap Road	8530	7210	7460	1660 (26%)	1950 (26%)

* Note: heavy vehicle volume as proportion of ADT is shown in brackets

Source: Connell Wagner, 2007

Table 2.2 shows the traffic volumes along each of the side roads for the AM and PM peaks and for the 12 hour survey period. The low volumes illustrate how these roads generally serve local traffic, and are not used as through routes.

Table 2.2 Traffic volumes along side roads for 12hr period

Side Road	Traffic Volumes (Two Way)		
	AM Peak (veh/hr)	PM Peak (veh/hr)	Traffic Volumes for 12 hour period from 7.00am to 7.00pm
Jacky Bulbin Road	19	16	236
Swan Bay New Italy Road*	24	32	245
The Gap Road	18	16	117

* includes traffic volumes recorded at car park access road to the rest area

Source: Connell Wagner, 2007

The results of the traffic counts and analysis indicate that more than 90% (see **Table 2.3**) of the traffic travelling within the study area is through traffic (ie it does not have an origin or destination within the study area).

Table 2.3 Through and local traffic comparisons

Location	ADT	Local	%	Through	%
North of Iluka Road	6939	387*	6	6552*	94
North of The Gap Road	7151	599*	8	6552*	92

* Note: as origin-destination surveys were not carried out, these figures are estimates based on ADT (average daily traffic) volumes derived from traffic survey results in 2005.

Source: Connell Wagner, 2007

2.2 Accident statistics

An historical crash analysis was undertaken for the five year period from January 2002 to December 2006 between Iluka Road and Tuckombil Canal. The results of the crash analysis can be summarised as follows:

- A total of 95 crashes occurred, including 12 fatal crashes and 48 injury crashes.
- The majority of the fatal crashes (71% of the fatal crashes) were head-on crashes.
- A total of 20 crashes were reported as speed-related crashes and 23 crashes were reported as fatigue-related crashes.
- A total of 28 crashes involved heavy vehicles, which is an over-representation of heavy vehicles.

The wire rope fences currently being installed in the median of the highway would be expected to reduce the number of head-on collisions within the study area and this measure would also reduce the number of fatal crashes and fatalities.

The following crash rates per 100 million vehicle kilometres travelled (Mvkt) have been calculated for the crashes that were reported between January 2002 and December 2006 within the study area:

- Fatal crashes – 2 per 100 Mvkt.
- Injury crashes – 8 per 100 Mvkt.
- Total crashes – 21 per 100 Mvkt.

The RTA's Economic Analysis Manual (EAM) contains typical crash reductions based on before-and-after studies undertaken by the RTA to test the effectiveness of implementing various alternative road upgrade treatments. The following crash reductions are predicted:

- Since most of the existing fatal crashes are head-on collisions, the majority of these would be expected to be eliminated with the completion of the duplicated highway.
- The reduction in run-off road crashes would be small since the EAM indicates that only 10% of the run-off road crashes would be eliminated by duplicating the highway.
- The EAM indicates that a 30% reduction in rear-end crashes can be expected with the duplication of the highway.
- Based on the current proposal for rest-area provision it is assumed that fatigue-related crashes would continue to occur at the same rate as existing.

One of the project objectives for the proposal is to reduce the crash rate to 15 crashes per 100 Mvkt over the project length. Using the EAM methodology, the current crash rate is predicted to be reduced from 21 to 16 crashes per 100 Mvkt for the Class A upgrade proposal as a result of duplicating the highway.

2.3 Future traffic / travel demand

The AADT volume along the highway is predicted to be 11,020 vehicle movements in 2016, and 15,720 vehicle movements in 2036 (20 years after opening). Of these total volumes, heavy vehicle movements make up approximately 2,187 per day (20%) in 2016 and 3,120 (20%) in 2036. Both the total and heavy vehicle traffic movements are therefore predicted to increase by approximately 80% in 2036 compared to existing traffic levels.

2.4 Local road network

Within the study area, the Pacific Highway serves a small, dispersed population that is mainly found in the following locations:

- Banana Road, 36 km south of Woodburn, west side of Pacific Highway.
- Jacky Bulbin Road, 30 km south of Woodburn, west side of Pacific Highway.
- Serendipity Road, 18 km south of Woodburn, east side of Pacific Highway.
- Cypress Road, 12 km south of Woodburn, west side of Pacific Highway.
- Swan Bay New Italy Road, 11 km south of Woodburn, west side of the Pacific Highway.
- Whites Road (west side) and Turners Road (east side), 8.5 km south of Woodburn.
- Tuckombil Road and The Gap Road, 3 to 5 km south of Woodburn, east side of the Pacific Highway.
- Wondawee Way, 3 km south of Woodburn, west side of the Pacific Highway.
- Trustums Road and Williams Road, 2 km south of Woodburn, west side of the Pacific Highway.

Other local roads within the study area serve the extensive areas of State Forest, National Park and nature reserve situated on both sides of the highway.

2.5 Approvals under the *Environmental Planning and Assessment Act 1979*

2.5.1 *Part 3A of the Environmental Planning and Assessment Act 1979*

Assessment and approval of major infrastructure in NSW, including highway upgrade projects, are controlled primarily under the provisions of the NSW Environmental Planning and Assessment Act 1979. The Environmental Planning and Assessment Amendment (Infrastructure and other Planning Reform) Act 2005 introduced amendments that require major private and government projects to be assessed under Part 3A of the Act. It applies to: Major infrastructure or other development that, in the opinion of the Minister, is of State or regional environmental planning significance.

Major infrastructure or other development that is an activity for which the proponent is also the determining authority (within the meaning of Part 5) and that, in the opinion of the proponent, would (but for Part 3A) require an environmental impact statement to be prepared under that Part.

The focus of the new Part 3A is on ensuring the appropriate level of community consultation and environmental assessment is undertaken, based on the level of risk or community concern. Part 3A removes the stop-the-clock provisions and the need for single-issue approvals under eight other Acts. It also replaces a separate threatened species assessment with an integrated assessment process.

2.5.2 *Critical infrastructure*

The 2005 amendments to the Environmental Planning and Assessment Act include the provision that, if Part 3A applies to a project, that project could also be declared critical infrastructure. A "critical infrastructure" project is a project considered to be essential to the economic, social or environmental welfare of NSW.

The assessment and approval process for critical infrastructure is similar to a Part 3A project, however some notable changes under section 75C:

- Excludes compliance with all environmental planning instruments (except State Environmental Planning Policies specifically relating to the project).
- Excludes third-party appeals under the Act or other environmental protection legislation.

In addition the following orders cannot be made or given to prevent or interfere with the carrying out of an approved project:

- Interim protection orders under the National Parks and Wildlife Act 1974 or Threatened Species Conservation Act 1995.
- Stop Work orders under the National Parks and Wildlife Act 1974, Threatened Species Conservation Act 1995, Fisheries Management Act 1994.
- An environmental protection notice under the Protection of the Environment Operations Act 1997.
- An order under the Local Government Act 1993.

2.5.3 Part 3A, critical infrastructure and the Iluka Road to Woodburn project

On 5 December 2006, the Minister for Planning under 75B(1) of the Act ordered that 13 projects part of the Pacific Highway Upgrade Program, including the Iluka Road to Woodburn Upgrade, be projects to which Part 3A applies. These projects were also declared as Critical Infrastructure under Section 75C of the Act, as being essential to the State for economic and social reasons.

The Part 3A planning approval process is initiated by the submission of a project application to the Department of Planning. A set of environmental assessment requirements is then issued by the Director General of the Department of Planning, in consultation with other government agencies. These environmental assessment requirements outline the key issues which are to be addressed in the Environmental Assessment (EA). After submission of the EA to the Department of Planning, it is placed on public display for a period of no less than 30 days.

At the end of the display, the Department of Planning may provide the RTA with a copy of the submissions received or a summary of the issues raised. The RTA will be asked to respond and may modify the proposal to minimise impacts on the environment as a result of submissions received. If the RTA changes the proposal in response to the issues raised, a Preferred Project Report describing the revised project would be prepared and made publicly available.

The proposal will then be assessed by the Department of Planning and considered for approval by the Minister for Planning. Upon receipt of approval, the RTA will then determine whether or not to proceed with the project.