

chapter 5.6 TRANSPORT

5.6 Transport

5.6.1 Overview

A traffic and transport assessment was prepared by SCT Consulting and is provided in Appendix Q. Traffic impacts on the existing road network were determined with reference to the performance standards defined in the *Austroads Guide to traffic management* (RTA 2009) and *Guide to Traffic Generating Developments* (RMS 2002). To establish the existing traffic conditions adjacent to the Exploratory Works, traffic surveys were undertaken between January and April of 2018.

The existing roadway levels of service were compared against the predicted levels of service with the addition of traffic generated by Exploratory Works. Traffic impacts were also considered for the project area's internal road network, public transport, walking and cycling, traffic crashes and emergency vehicles.

5.6.2 Existing environment

The existing road network and primary transport routes for Exploratory Works are shown in Figure 5.14. It extends beyond the project area and is defined as the extent of the primary transport routes shown in Figure 5.11. Roads outside the project area are referred to as the external road network while those within the disturbance footprint are referred to as the internal road network. External roads likely to be used by traffic generated by Exploratory Works are:

- Snowy Mountains Highway;
- Link Road; and
- Miles Franklin Drive.

Internal roads include Lobs Hole Ravine Road, Lobs Hole Road, Mine Trail Road, Middle Bay Road and Spillway Road. The existing road conditions for the roads likely to be affected are summarised below.

i Snowy Mountains Highway

Snowy Mountains Highway (B72) is a 333 km state highway connection between Hume Highway at Mount Adrah and Princes Highway at Stony Creek. It is a two-lane two-way rural highway for the majority of its alignment, with sign posted speed limits ranging between 60 km/h to 100 km/h. The Snowy Mountains Highway passes through Tumut and Cooma and functions as a town centre main road in both locations During snow season the Snowy Mountains Highway also provides access to Selwyn Snow Resort for vehicles travelling from either Tumut or Cooma.

In proximity to the project area, the Snowy Mountains Highway was determined to have a maximum of 140 vehicles per hour and an existing level of service 'A' as defined by the Austroads guidelines (RTA 2009). Peak traffic volumes were observed to occur during the middle of the day, generally between 12pm and 1pm. Between 2012 and 2017, 15 traffic crashes were recorded by RMS on the Snowy Mountains Highway in the area and involved mainly single vehicles striking an animal or running off the road.



ii Link Road

Link Road is a two-lane road between Goat Ridge Road to the west and Snowy Mountains Highway (B72) to the east. Link Road also provides the connection between Cabramurra and the Snowy Mountains Highway with a speed limit ranging between 80 km/h to 45 km/h. During snow season, traffic volumes along the road increase due to the nearby Selwyn Snow Resort, which is accessible via the Link Road and Kings Cross Road intersection.

Link Road was determined to have a maximum of 70 vehicles per hour and an existing level of service 'C' as defined by the Austroads guidelines (RTA 2009). This level of service is based on a speed assessment on certain sections of this road rather than the traffic volumes relative to the road capacity. Peak traffic volumes were observed to occur during the middle of the day, generally between 12 pm and 1 pm. Between 2012 and 2017, four traffic crashes were reported on Link Road all of which only involved a single vehicle and occurred when there was ice, snow or water on the road.

iii Miles Franklin Drive

Miles Franklin Drive is a two-lane road that provides the main connection to the town of Talbingo. The roadway also provides access to the Tumut 3 power station and Talbingo Spillway. Between Talbingo and the Snowy Mountains Highway, Miles Franklin Drive is signposted with a speed limit of 80 km/hr, reducing to 60 km/hr on approach to the town of Talbingo. Between the Tumut 3 power station and Talbingo the speed limit increases to 100 km/hr.

At Talbingo Mile Franklin Drive is a residential street. It has a maximum of 60 vehicles per hour observed during the traffic surveys. Miles Franklin Drive was determined to function within the relevant environmental capacity performance standards for residential streets at all times as defined by the Austroads guidelines (RMS 2002). Peak traffic volumes were observed to occur during the middle of the day, generally between 12 pm and 1 pm. Between 2012 and 2017, two traffic crashes were reported on Miles Franklin Drive both of which were single vehicle crashes.

5.6.3 Assessment of impacts

During Exploratory Works, there will be multiple vehicles accessing the site from the external road network as well as circulating within the internal road network. The majority of these vehicles will be delivering materials associated with the construction of the Exploratory Works elements.

The forecast peak heavy vehicle generation occurs in the sixth month of the project with some 423 heavy vehicles accessing the project area in one month. A peak hour of 44 two-way traffic movements is expected to occur during this month between 9 am and 10 am travelling via Link Road to and from the project area. The forecast peak hour does not coincide with the recorded peak hour of 12pm to 1pm for the assessed external road network.

The assessment focused on impacts to the external road network and also considers the internal road network, public transport, crashes and emergency vehicles. This section provides a summary of the assessment.

i Snowy Mountains Highway

For assessment purposes, it was assumed that all traffic would access Snowy Mountains Highway south of Link Road in the direction of Cooma. The Snowy Mountains Highway is expected to remain at the existing performance level of service 'A' throughout Exploratory Works. A comparison of existing traffic volumes on the Snowy Mountains Highway and traffic volumes during the peak construction period are summarised in Table 5.14.

Table 5.14 Snowy Mountains Highway traffic volume impacts

Time period	Motorcycles	Light vehicles	Heavy vehicles	Total vehicles	Passenger car units	Level of service
Existing conditions [peak hour of 12–1pm]	3 2	23 29	3 2	29 33	33 36	A A
Peak construction period ¹ [peak hour 9–10am]	2 2	16 21	24 22	42 45	86 85	A A

 Notes:
 Southbound traffic volume | Northbound traffic volume

 1. Represents total traffic (background traffic plus expected construction traffic) during the peak construction period

ii Link Road

Link Road is expected to remain at the existing performance level of service 'C' throughout Exploratory Works. A comparison of existing traffic volumes on Link Road and traffic volumes during the peak construction period are summarised in Table 5.15.

Table 5.15 Link Road traffic volume impacts

Time period	Motorcycles	Light vehicles	Heavy vehicles	Total vehicles	Passenger car units	Level of service
Existing conditions [peak hour of 12–1pm]	1 2	14 16	2 2	17 20	19 22	c c
Peak construction period [peak hour 9–10am]	1 2	12 9	23 22	36 33	79 73	C C

Notes:Southbound traffic volume | Northbound traffic volume1. Represents total traffic (background traffic plus expected construction traffic) during the peak construction
period

iii Miles Franklin Drive

Construction vehicle movements along Miles Franklin Drive will only be undertaken to deliver equipment and materials not able to be transported via Lobs Hole Ravine Road and during barge ramp construction. This is expected to be an occasional occurrence that will not impact the operational performance of the road. Therefore, it is forecast that the existing operational performance of Miles Franklin Drive will be maintained throughout Exploratory Works.

iv Internal road network

The internal road network will be closed to the public for the duration of Exploratory Works and upgraded to a standard suitable for the safe operation of construction traffic. Therefore no traffic and transport impacts to internal roads are anticipated.

v Public transport

There are no regular mass transport systems currently in operation within the vicinity of the project area. No impact will result from construction activities associated with Exploratory Works.

vi Traffic crashes

The increase in traffic volumes due to Exploratory Works is unlikely to affect the incidence of traffic crashes observed along Snowy Mountains Highway, Link Road and Miles Franklin Drive. The majority of crashes recorded in proximity to the project area were single vehicle accidents resulting from motorists losing control of their vehicle due to the surface conditions or road alignment. These types of crashes typically result from factors unrelated to traffic volumes such as travel speed, driver awareness/fatigue, familiarity of the road and alcohol/drugs.

vii Emergency vehicles

Access for emergency vehicles will be unaffected during Exploratory Works as there are no plans to close any roads to emergency vehicles.

5.6.4 Mitigation measures

The impact of additional traffic volumes generated by Exploratory Works on the external road network will not lead to any noticeable change in the existing roadway level of service performance standards for the affected roads.

Similarly the Exploratory Works traffic and transport impacts are not predicted to have any negative impacts on the internal road network, public transport, traffic crashes or emergency vehicles. Notwithstanding this, several measures will be implemented to mitigate traffic and transport impacts from Exploratory Works. These mitigation measures are summarised in Table 5.16. Where appropriate, these measures will have regard to the existing Roads Maintenance Agreement with NPWS.

Table 5.16 Summary of traffic and transport mitigation measures

Impacts	Reference	Environmental management measure
Construction traffic TRA01 management plan		A Construction Traffic Management Plan (CTMP) will be prepared and implemented during construction. The CTMP will set out the strategy and procedures to manage the impacts of the Exploratory Works construction on the local road network and traffic systems, including:
		 community and stakeholder notification processes for oversized vehicle movements and any planned disruptions to traffic and restriction of access to areas of KNP and Talbingo Reservoir
		 traffic safety requirements, including appropriate signage, driver conduct and safety protocols.

Table 5.16 Summary of traffic and transport mitigation measures

Impacts	Reference	Environmental management measure
Road maintenance	TRA02	Road maintenance will be managed through the following measures:
		 a Road Dilapidation Report will be prepared and approved prior to and following Exploratory Works;
		 routine defect identification and rectification of the internal road network will be managed as part of the project maintenance procedure; and
		 internal access roads will be designed in accordance with the relevant vehicle loading requirements.
Signage	TRA03	Where changes to the traffic conditions are required, appropriate signage will be installed in accordance with the following:
		 Traffic Control Device for Works on Roads (AS1742.3; 2009); and
		 Traffic Control at Work Sites (Roads and Maritime Services; 2010).
Time of travel	TRA04	Standard hours of operation of heavy vehicles on public roads will observe the industry standard hours of 7 am to 6 pm during weekdays, excluding Lobs Hole Ravine Road where no heavy vehicle movements will occur before 8 am.
Traffic control	TRA05	Where temporary occupation of lanes is required traffic control measures specified in AS1742-2002 will be implemented. Where works require lane occupancy on RMS or council classified roads, a Road Occupancy Licence will be obtained.