

Route Selection Assessment

Proposed Port Kembla Bulk Liquids Terminal

TQ Reference: PJ-PK-0001-REPT-015

8201510302/Report T002 Rev 4



Prepared for
TQ Holdings Australia Pty Ltd

2 December 2015



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Appendix A RMS Traffic Accident Reports**Appendix B** RMS Traffic Counts – Five Islands Road

1 Introduction

1.1 Background

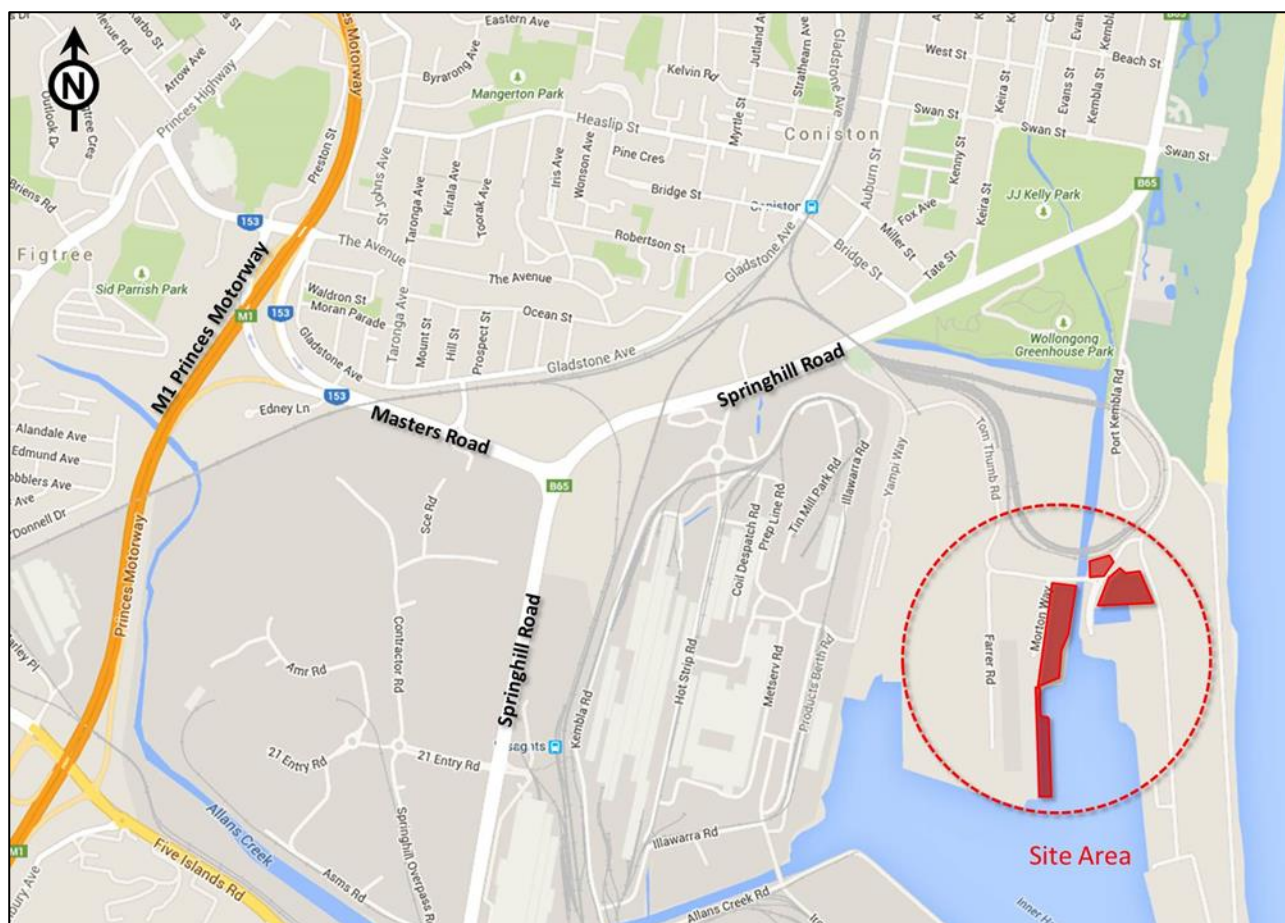
TQ Holdings Australia Pty Ltd (TQ) is planning to develop a Bulk Liquids Terminal (PK BLT) with capacity of up to 288 ML of storage for combustible and flammable liquids located in Port Kembla New South Wales. The Terminal will operate as an import product terminal. Product would be received by tanker ships and despatched to customers by road tankers.

Cardno has been engaged by TQ to prepare a Route Selection Assessment for the Project. This assessment has been prepared to identify the routes which minimise risks to the community and the environment in accordance with the NSW Hazardous Industry Planning Advisory Paper No 11: Route Selection (2011)

1.2 Site Location

The PK BLT is located in Port Kembla New South Wales on Tom Thumb Road approximately 1.5 kilometres from the Springhill Road intersection. **Figure 1-1** illustrates the site location and provides an overview of the surrounding area.

Figure 1-1 Site Location



1.3 Regulatory Framework

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) provides a framework for the planning and assessment of development proposals which could potentially have major environmental and safety consequences. The operational vehicle movements generated by the proposal are above the thresholds set by SEPP 33 at which the proposal is 'potentially hazardous' with respect to transportation and a route evaluation study is required.

The guidelines for performing this route evaluation study are set out in *Hazardous Industry Planning Advisory Paper No. 11 – Route Selection* (HIPAP No. 11).

1.4 Scope of Works

The scope of works for this study is as follows:

- > Review background documents and legislative requirements, specifically
 - Applying SEPP33 - Hazardous and Offensive Development Application Guidelines, NSW Department of Planning (January 2011)
 - Hazardous Industry Planning Advisory Paper (HIPAP) 11: Route Selection, NSW Department of Planning (January 2011)
 - Port Kembla Bulk Liquids Terminal Preliminary Hazard Analysis (PHA), Sherpa Consulting (3 July 2015)
 - Port Kembla Bulk Liquids Terminal Traffic Impact Assessment (Cardno 2015)
- > Define Study Area based on anticipated TQ truck routes;
- > Identify road hierarchy within study area and propose least risk truck routes based on:
 - Review of Road and Traffic factors to identify least risk routes for transportation of hazardous material;
 - Review of Land Use factors to identify least risk routes for transportation of hazardous material;
 - Review of crash history factors to identify least risk routes for transportation of hazardous material;
 - Consideration of emergency response routes;
- > Identification of road and transport mitigation measures, if applicable. For example, intersection treatments to reduce delay or delineation/signage to reduce risk of crashes.

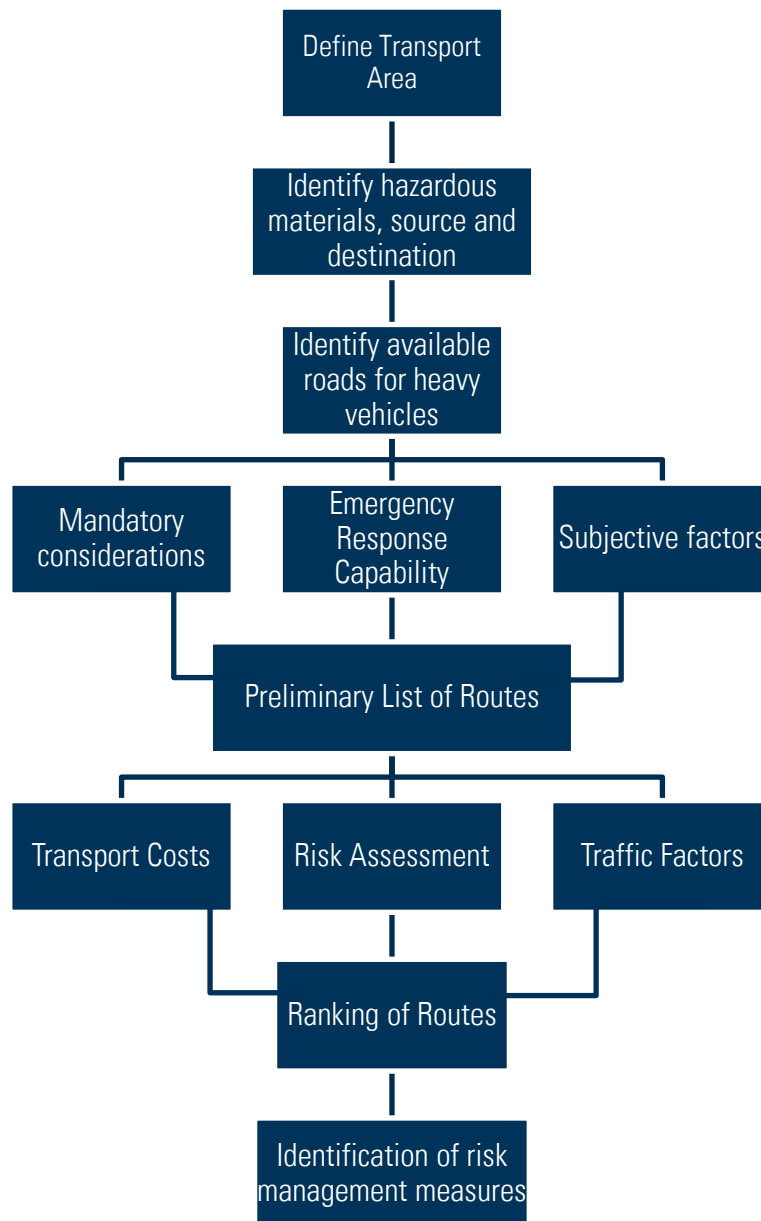
1.5 Reference Documents

- > *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*
- > *Hazardous Industry Planning Advisory Paper No. 11 – Route Selection*
- > *SIX Vegetation Maps, OEH, 2015,*
< http://maps.six.nsw.gov.au/apps/channels_3.5/landing/vegetation/vegetation.html >
- > *Roads and Maritime Services – Restricted Access Vehicle Map 2015,*
< <http://www.rms.nsw.gov.au/business-industry/heavy-vehicles/maps/restricted-access-vehicles-map/map/index.html> >

2 Approach & Methodology

The route assessment and selection process used in this assessment is set out in HIPAP No. 11. The process is designed to quantitatively and qualitatively identify, evaluate and rank potential vehicle routes so that risks to the environment and community are minimised.

Figure 2-1 Assessment Process (Adapted from Figures 2 and 3 of HIPAP No. 11)

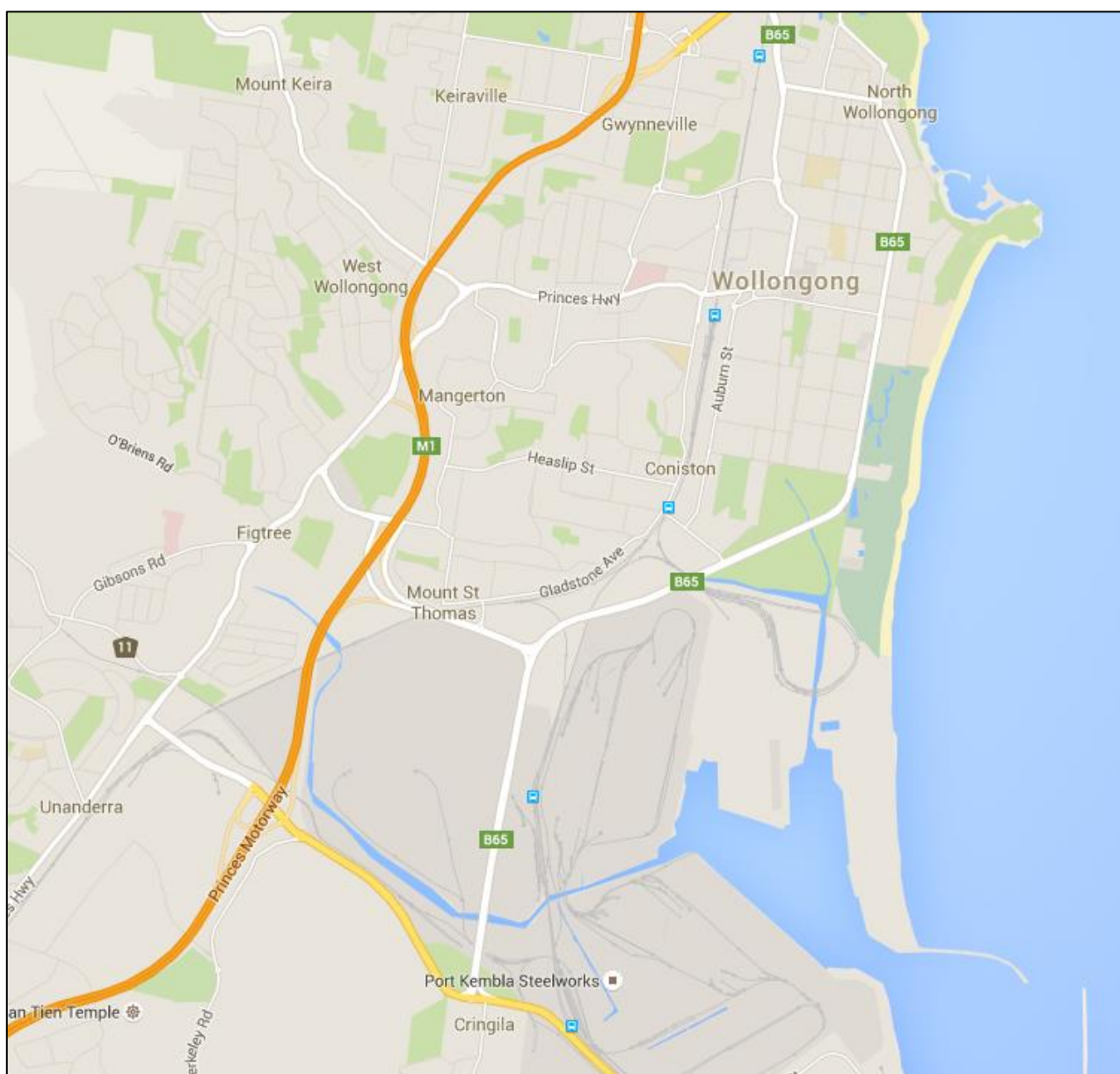


3 Identification of Study Area

The proposed bulk liquids terminal is designed to contribute to national fuel security and fuel supply for the whole of the NSW/ACT region. Consequently the study area has been defined broadly to assess routes which connect to intercity and interstate roads. HIPAP No. 11 provides guidance for how site-specific studies should identify their study area: *“Definition of the transport area is carried out from a traffic perspective. It should include the area over which traffic to or from the development is likely to have a significant effect.”*

Consequently the study area encompasses the roads which could reasonably connect the facility at Port Kembla to the Princes Motorway. Once the heavy vehicles have reached Princes Motorway they will be able to access their final destinations (as shown in Figure 4-1) largely via the State Road network, at which point the bulk liquid fuel tankers will be dispersed and would not be considered to have a “significant effect” on the road network. Further, as a prescribed heavy vehicle route the Princes Motorway is suitable for the transportation of freight, including hazardous materials. Therefore, this study is limited to the routes required to access Princes Motorway but does not consider the Princes Motorway itself.

Figure 3-1 Map of Study Area



4 Identification of Hazardous Materials, Source & Destination

The proposed bulk liquids terminal will be used for importing, storing and distributing combustible and flammable fuel products. Fuel will be imported via international shipping to Port Kembla. The fuel will be stored at the facility in purpose-built storage tanks. The fuel will then be distributed directly to fuel retailers and industrial scale fuel users via fuel tankers.

Fuel tankers supplied by this facility may make deliveries across a wide area including metropolitan Sydney, southern NSW and the Australian Capital Territory.

Figure 4-1 Expected Delivery Destination Regions

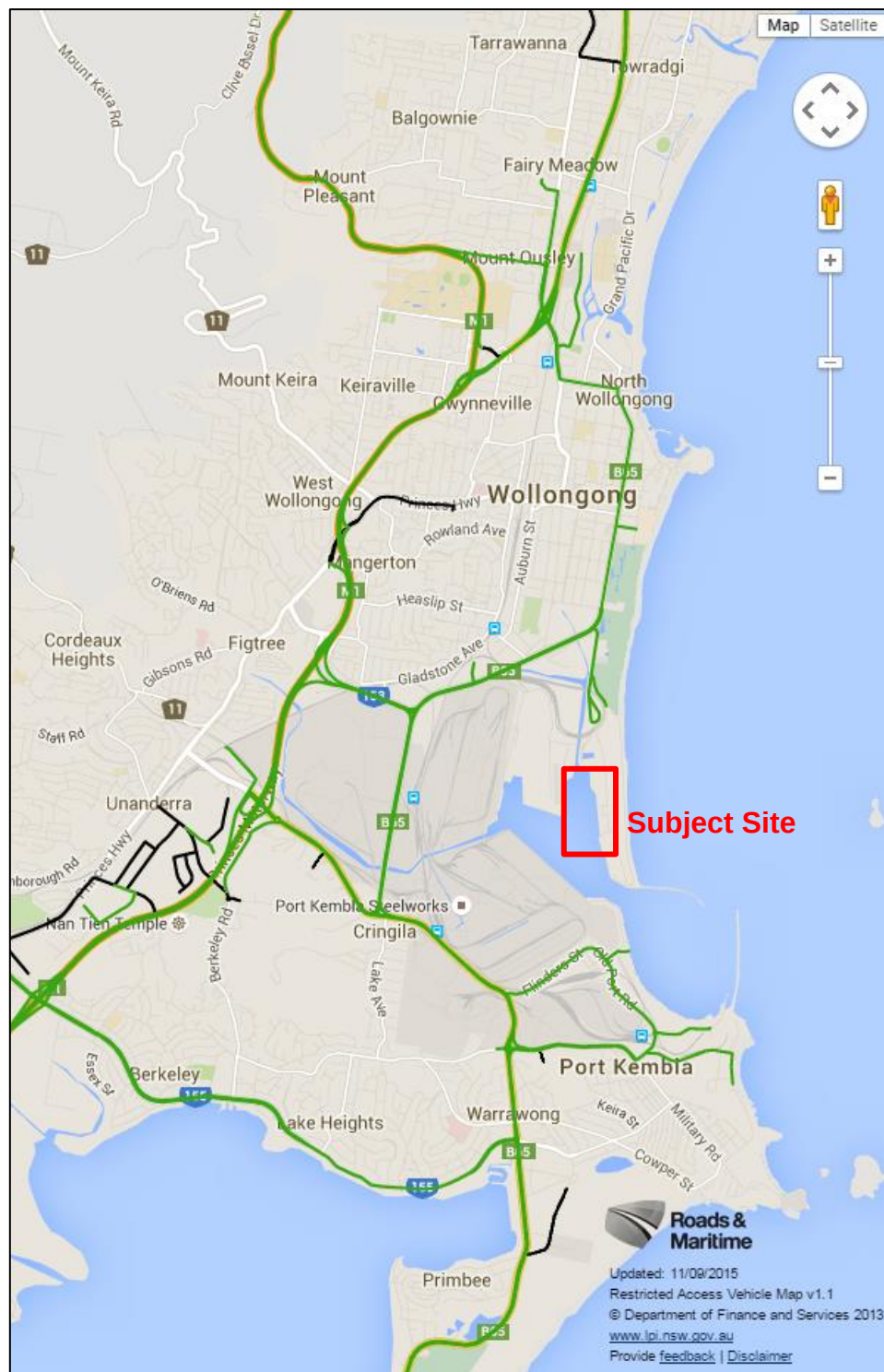


Source: Roads and Maritime Services – Restricted Access Vehicle Map 2015

5 Identification & Assessment of Available Roads for Heavy Vehicles

Roads suitable for use by heavy vehicles in NSW are shown on the RMS Restricted Access Vehicle maps. Roads suitable for restricted access vehicles are shown in dark green.

Figure 5-1 RMS RAV Map (Port Kembla Area)



Source: Roads and Maritime Services – Restricted Access Vehicle Map 2015

5.2 Port Kembla and Wollongong Area Roads

From the available restricted vehicle access roads, the following key roads have been identified as relevant to the facility and suitable for the carriage of heavy vehicles.

Table 5-1 Assessment of Port Kembla & Wollongong Area Roads

Road	Mandatory Considerations	Subjective Considerations	Emergency Response	Suitability
Springhill Road	Up to 26m B-Double vehicles.	Surrounded by buffer areas and industrial development. Sub-arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Most Preferred
Masters Road	Up to 26m B-Double vehicles.	Largely surrounded by buffer areas and industrial development. Some nearby residential areas at western onramps. Sub-arterial road, with fewer intersections than other options.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Most Preferred
Princes Motorway	Up to 26m B-Double vehicles.	Major motorway and road freight route. Significant buffer areas and noise barriers along the alignment. Generally bypasses commercial centres. Arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Preferred
Five Islands Road	Up to 26m B-Double vehicles.	Surrounded by buffer areas and industrial development. Existing industrial traffic. Sub-arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Preferred
Corrimal Street	Up to 26m B-Double vehicles.	Surrounded by sensitive residential, commercial and retail land uses at low to high densities. Heavy pedestrian activity. Collector Road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Least Preferred
Memorial Drive	Up to 26m B-Double vehicles.	Noise barriers and buffers are in place. Surrounded by low density residential land uses. Arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Acceptable
King Street and Windang Road	Up to 26m B-Double vehicles.	Passes through minor commercial centres and low density residential areas. Significant pedestrian activity within commercial centres. Sub-arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Least Preferred
Northcliffe Drive	Up to 26m B-Double vehicles.	Passes through low density residential areas. Passes the boundaries of 2 schools. Sub-arterial road.	Good, access possible to Wollongong Hospital or Port Kembla Hospital.	Least Preferred

6 Identification of Preferred Routes

From the roads identified in **Section 5**, only a single preferred route has been identified.

6.1 Princes Motorway via Masters Road & Five Islands Road

This route connects to delivery sites throughout Wollongong via the Princes Motorway. Outbound delivery tankers will exit the secure Port Kembla road network via Tom Thumb Road. Once through the security checkpoint, the tankers will turn left onto Springhill Road. Tankers will then proceed south to the intersection of Springhill Road and Masters Road.

At this intersection tankers will turn right to access Masters Road and proceed west to the south or north onramps to the Princes Motorway. The Princes Motorway provides connection to all major roads and districts within the Wollongong and Shellharbour local government areas.

Returning tankers from the north of the Illawarra can return via the Masters Road off ramp and proceed to return via Masters Road and Springhill Road. Vehicles returning from the southern Illawarra must return via the Five Islands Road off ramp at Unanderra. They can then proceed onto Five Islands Road and Springhill Road.

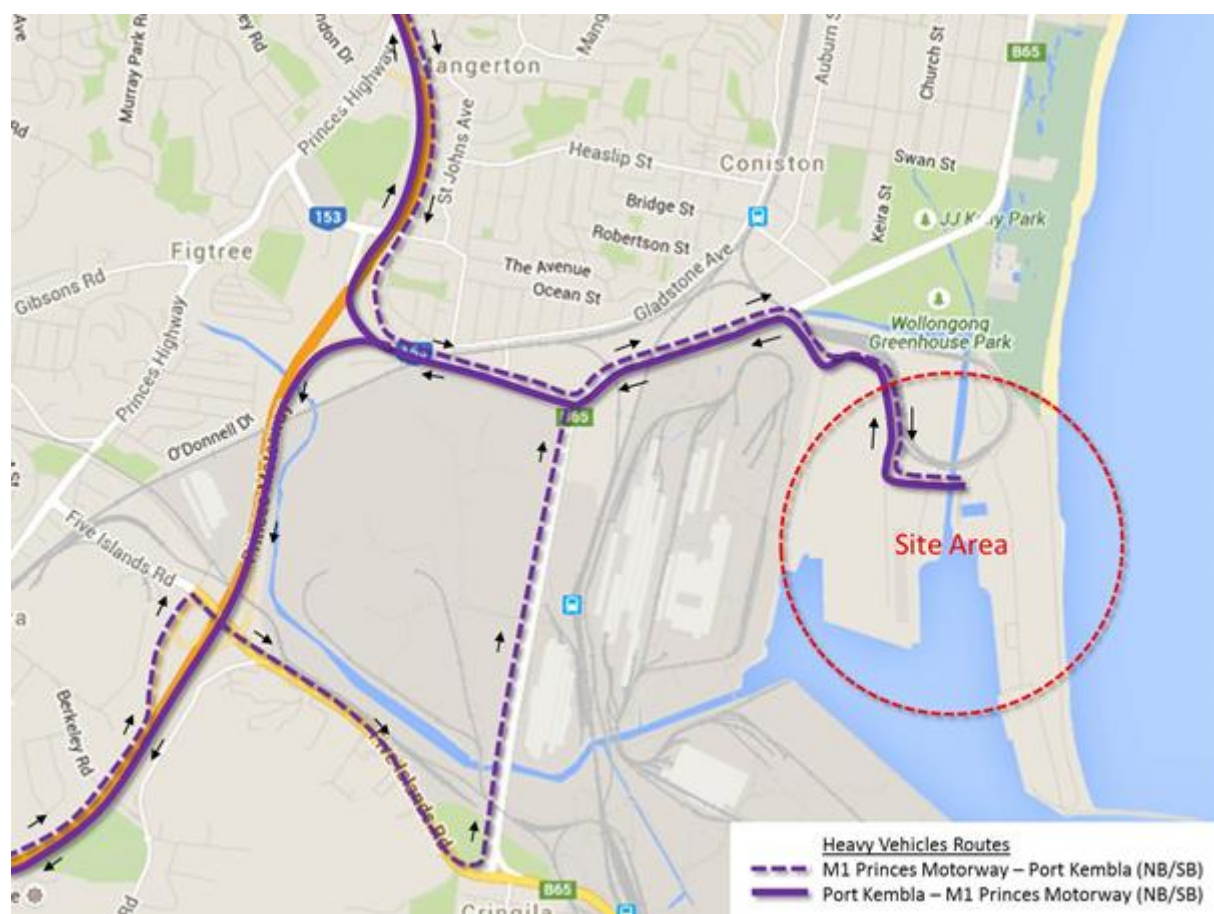
6.1.1 Roads Suitable for the Carriage of Dangerous Goods

The proposed route does not include any road sections which are identified as unsuitable for the transport of dangerous goods. This is confirmed by a review of Section 300-2 of the *Road Rules 2014* which prescribes the following road segments as unsuitable:

- The tunnel on the Cahill Expressway beneath the Royal Botanic Gardens
- The tunnel connecting the Cahill Expressway with Bradfield Highway
- Bradfield Highway between the hours of 7am and 9.30am Monday to Saturday both days inclusive and between the hours of 4pm and 6.30pm Monday to Friday both days inclusive
- The tunnel on General Holmes Drive beneath the extension of the north-south runway of Kingsford Smith Airport
- The tunnel on Main Road Number 173 between Victoria Street and the extension of Kellett Avenue, Kings Cross
- The Sydney Harbour Tunnel
- The tunnel on the M2 Motorway beneath Norfolk Road at North Epping
- The Eastern Distributor from the Art Gallery Road bridge, Woolloomooloo to Link Road, Zetland including the Anzac Parade and Moore Park Road branches
- The tunnels on the M5 Motorway between Bexley Road, Bexley North, and General Holmes Drive, Kyeemagh
- The Cross City Tunnels between Harbour Street, Darling Harbour and Ward Avenue, Kings Cross, and between Ward Avenue, Kings Cross and Sir John Young Crescent, Woolloomooloo
- The Lane Cove Tunnels between Mowbray Road West and the Gore Hill Freeway

The proposed route does not include any of these prescribed segments and is therefore considered to be suitable for the purposes of the *Road Rules 2014*.

Figure 6-1 Route Map



7 Assessment of Potential Routes

7.1 Princes Motorway via Masters Road & Five Islands Road

7.1.1 Road & Traffic Factors

7.1.1.1 Structural and Geometric Adequacy of Roads

Springhill Road, Five Islands Road and Masters Road have all been constructed to facilitate the movement of industrial traffic between Port Kembla and the Princes Motorway.

All roads which form part of the proposed route are high capacity arterial roads with at least three marked lanes in each direction. This provides sufficient capacity to accommodate existing vehicle traffic and future traffic growth in addition the traffic generated by the proposed development.

There are no bridge weight limits or height limits which would impose vehicle restrictions on the proposed route. All intersections, corners and turning lanes are designed to accommodate heavy vehicles without posing a risk to other road traffic.

7.1.1.2 Carriageway Levels of Service

The major carriageways have been assessed to determine their capacity to accept the proposed development traffic.

Traffic counts have been taken from the Port Kembla Bulk Liquids Terminal Traffic Impact Assessment (Cardno 2015). This included traffic counts at key intersections. Traffic counts for Five Islands Road were obtained from RMS for the years (1996-2002 and 2007). These traffic counts were then compared to Table 2 of HIPAP No. 11 – Appendix 1 which provides a suggested one-way traffic volumes (PCU) for urban roads at different levels of service.

All roads assessed are formed as separated carriageways with at least 3 lanes in each direction. It is also noted that Springhill Road and Masters Road have almost no side streets or access ways which could admit side traffic. According to Appendix 1 of HIPAP No. 11, the limits suggested in Table 2 can be increased by between 20% and 40% under conditions where roads have additional capacity because there is minimal access for side traffic.

Once the limited side access to these roads is considered, they are found to perform acceptably.

Table 7-1 Road Carriageway Level of Service Summary

Road Segment	Peak Hour Traffic (Largest Traffic Movement Direction)	Carriageway Level of Service (LoS) (As per Table 2 of Appendix 1 of HIPAP 11)	Carriageway Level of Service (LoS) (Limits 40% Higher due to reduced side access, as per Appendix 1 of HIPAP 11)
Springhill Road			
AM Peak (At Tom Thumb Road)	3024	F	C
Springhill Road			
PM Peak (At Tom Thumb Road)	2411	D	A
Masters Road			
AM Peak (At Springhill Road)	1555	A	A

Road Segment	Peak Hour Traffic (Largest Traffic Movement Direction)	Carriageway Level of Service (LoS) (As per Table 2 of Appendix 1 of HIPAP 11)	Carriageway Level of Service (LoS) (Limits 40% Higher due to reduced side access, as per Appendix 1 of HIPAP 11)
Masters Road PM Peak (At Springhill Road)	2091	C	A
Five Islands Road AM Peak (At Springhill Road)	1538	A	A
Five Islands Road PM Peak (At Springhill Road)	1118	A	A

7.1.1.3 Level of Service at Critical Intersections

Key intersections at Masters Road and Springhill Road were assessed to determine their present conditions. Inbound traffic from the southern Princes Motorway will use the exit at Five Islands Road. The intersection of Five Islands Road has not been assessed because a free flow on ramp provides access to Spring Hill Road from Five Islands Road (for inbound vehicles) therefore it is assumed that delay and queueing will not be an issue.

Table 7-2 Key Intersection Level of Service Summary

Intersection	Control Type	AM Peak			PM Peak		
		Degree of Saturation (DoS)	Average Delay (s)	Level of Service (LoS)	Degree of Saturation (DoS)	Average Delay (s)	Level of Service (LoS)
Masters Road / Springhill Road	Signal Controlled	0.85	37	C	0.80	37	C
Springhill Road / Tom Thumb Road	Signal Controlled	0.81	18	B	0.80	19	B

(Source: BLT TIA, Cardno 2015)

7.1.1.4 Travel Speed

Masters Road and Springhill Road have sign posted speed limits of 80km/hour in both directions. Generally, traffic operates at close to this speed outside the peak periods. Travel time from the site to the Princes Motorway is less than 5 minutes via Masters Road and less than 10 minutes via Five Islands Road.

During peak periods, queueing at intersections reduces practical travel speed.

7.1.1.5 Vehicle Crashes

Vehicle crash information has been provided by RMS for three road segments which make up the route. Data has been provided for the period 01/01/2010 to 31/12/2014 for each segment.

The proportion of heavy vehicle traffic on Five Islands Road was not collected by the RMS traffic counters, consequently this proportion has been estimated as the same as Masters Road. A higher estimate for proportion of heavy vehicles would ultimately result in a lower calculated rate of heavy vehicle accidents per million kilometres travelled.

The key information is summarised below in **Table 7-3**.

Table 7-3 Key Traffic Accident Statistics for the Route Segments

Road Segment	Segment Length	Daily Traffic (AADT Both Directions)	Vehicle Accidents (All)	Vehicle Accidents (Heavy Vehicles)	Vehicle Accidents (No. resulting in injuries)	Vehicle Accidents (No. resulting in fatalities)
Springhill Road (Between Five Islands Road and Bridge Street – which encompasses the Tom Thumb Road intersection)	3.54km	53,000 (Maximum value for the segment) (5.0% heavy vehicles)	139	15	55	0
Masters Road (Between Princes Motorway and Springhill Road)	1.64km	36,300 (7.5% heavy vehicles)	14	4	5	0
Five Islands Road (Between Princes Motorway and Springhill Road)	1.8km	24,500 (7.5% heavy vehicles estimated)	67	11	33	0

This information can be further analysed to determine the rates at which vehicle accidents occur as per **Table 7-4** below.

Table 7-4 Calculated Accident Rates for the Road Segments

Road Segment	Vehicle Kilometres Travelled (over 5 years)	Heavy Vehicle Kilometres Travelled (over 5 years)	Vehicle Accidents Per Million Vehicle Kilometres	Heavy Vehicle Accidents Per Million Heavy Vehicle Kilometres	Injury causing accidents per Million Vehicle Kilometres
Springhill Road (Between Five Islands Road and Bridge Street)	342,406,500	17,120,325	0.41	0.88	0.16
Masters Road (Between Princes Motorway and Springhill Road)	108,645,900	8,148,443	0.13	0.49	0.05
Five Islands Road (Between Princes Motorway and Springhill Road)	80,482,500	6,036,188	0.83	1.82	0.41

From the calculated traffic accident rates above, it is possible to estimate the number of accidents that are likely to occur involving traffic associated with the development proposal's heavy vehicle traffic during full Stage 3 Operation. To estimate the range of risks, two traffic distribution scenarios have been evaluated.

- > **Scenario 1** assumes that all inbound and outbound traffic uses Masters Road and Springhill Rd. This is a low risk scenario because the distances travelled are shorter, with fewer intersections. It is also expected to be the preferred route where available.
- > **Scenario 2** assumes that all outbound traffic will exit via Springhill Road and Masters Road, whereas all inbound traffic will access the site via Five Islands Road and Springhill Road. This is worst case scenario which assumes all traffic will approach the proposed development from the northbound lanes of the Princes Motorway. This is a longer travel distance and consequently this has greater risks.

Table 7-5 Estimated Scenario 1 Traffic Accident Risk

Scenario 1	Springhill Road (IN and OUT)	Masters Road (IN and OUT)
Number of Heavy Vehicles per day	206	206
Segment Length (km)	1.05	1.64
Vehicle km per Day	216.3	337.84
Vehicle km per Year	78,950	123,312
Heavy Vehicle Accident Rate (Accidents per Million Vehicle km)	0.88	0.49
Route Segment Accident Rate (Accidents Per Year)	0.069	0.061
Total Accident Rate Per Year		0.13

Table 7-6 Estimated Scenario 2 Traffic Accident Risk

Scenario 2	Springhill Road (OUT)	Masters Road (OUT)	Five Islands Road (IN)	Springhill Road (IN)
Number of Heavy Vehicles per day	103	103	103	103
Segment Length (km)	1.05	1.64	1.8	3.26
Vehicle km per Day	108.15	168.92	185.4	335.78
Vehicle km per Year	39,475	61,656	67,671	122,560
Heavy Vehicle Accident Rate (Accidents per Million Vehicle km)	0.88	0.49	1.8	0.49
Route Segment Accident Rate (Accidents Per Year)	0.035	0.030	0.123	0.107
Total Accident Rate Per Year				0.296

Therefore, the probability of heavy vehicles from the proposal being involved in an accident of any kind, are calculated to be between 13% and 29% in any given year while travelling to the Princes Motorway along the preferred route.

It is noted that there have been no fatal road accidents or hazardous accident spills of any kind during the 5 year study period on these roads. Considering this together with the above accident rates, the probability of an accident occurring which would cause a fatality and/or lead to the spilling of combustible or flammable liquids as a result of the proposed development is very low. Further quantitative assessment is not considered necessary.

7.1.1.6 Emergency Response Capability

In the event of an incident on one of the nominated heavy vehicle routes, access is easily available for emergency vehicles originating in Wollongong or Sydney.

Access to the Princes Motorway can be provided via alternative routes if required. In the event that Masters Road was closed, full access would be retained to and from the Princes Motorway via Five Islands Road. If access via Five Islands Road was blocked, this would only directly affect inbound vehicles travelling north on the Motorway. In these cases, temporary access could be provided via King Street and Northcliffe Drive to the Princes Motorway.

7.1.1.7 Summary

The preferred route performs adequately when assessed on its road and traffic factors.

Table 7-7 Summary of Road & Traffic Factors

Consideration	Result
Structural and Geometric Adequacy	Suitable
Carriageway Level of Service	LoS C or better
Intersection Level of Service	LoS C or better
Travel Speed	80km/h outside peak periods. Reduced during peak periods.
Vehicle Crashes	Forecast as between 13% and 29.6% per year. No fatal crashes recorded with which to empirically estimate future fatal accident rates or severe crashes which could result in the release of transported liquids.
Availability of Alternative Emergency Routes	Alternative routes available.

7.1.2 Environmental and Land Use Safety Considerations

The preferred route runs on major industrial roads which are purpose built for the transport of freight by heavy vehicles. The proposed road corridors are heavily buffered through vegetated zones, industrial land uses and sound barriers which have removed or protected almost all potential inhabitants along the route. Springhill Road, Masters Road and Five Islands Road are already identified as heavy vehicle transport corridors and are engineered with this purpose in mind.

The combustible and flammable liquids which are likely to be transported from the proposed terminal are unlikely to have significant impacts or have fatal consequences beyond the road corridor even under a worst case scenario event considering the extensive buffer zones and protective measures which are already in place.

As calculated above in **Section 7.1.1.5**, the probability of an accident involving a vehicle associated with the proposal is low and no fatal accidents have occurred along the route during the 5 year period for which records are available. It is considered highly unlikely that an accident will occur which is sufficient to cause a release of fuel.

7.1.2.1 Environmental Assets

There are two significant environmental assets located along the proposed route:

The Coniston Woodland surrounds the intersection of Masters Road and Spring Hill Road. It is a remnant of pre-colonial vegetation and parts of it have been mapped as the *Illawarra Lowlands Grassy Woodland* endangered ecological community (SIX Vegetation Maps, OEH 2015). The woodland has been significantly affected by the amplification of Springhill Road and Masters Road over time. Edge effects are likely to be significant at the road/woodland interface which diminishes the ecological significance of those parts of the woodland closest to the road. These edges are also the areas which could be affected in the unlikely event of a severe accident, fire and loss of containment adjacent to the woodland. Therefore it is considered that the proposal presents a negligible risk to the environmental values of the woodland as a whole.

Allens Creek approaches and crosses the proposed route at two locations. Allens Creek and Branch Creek (a tributary) cross under the Princes Motorway near the intersection with Masters Road. In this location Allens Creek is a very disturbed environment with a mixture of engineered channels and natural channels which have been affected by nearby development. Where riparian vegetation exists, it has been mapped as dominated by exotic species (SIX Vegetation Maps, OEH 2015).

The other crossing location is a bridge on Springhill Road which crosses the lower tidal reaches of Allens Creek near its entrance into Port Kembla Harbour. This section of the creek is adjacent to steelworks facilities and only has landscaped vegetation or cleared land within its riparian zone. This section of the creek has been used as an outflow for industrial cooling systems operating within the steelworks and has a long history of contamination.

In both locations, Allens Creek is a significantly modified waterway which is already affected by run off and other impacts from large traffic volumes. A loss of containment by a vehicle associated with the proposal could lead to contamination of the waterway and/or the riparian zone. Permanent provision of spill kits at the crossings is not considered practical given the risk of vandalism and theft in public locations. Provision of large spill kits aboard tankers is not considered practical given that it may not be safe or possible for the driver to deploy the kit following a significant accident involving that vehicle.

Consequently, the low sensitivity of the surrounding land uses combined with the diminishingly small risk of an accident suggests that the risk of a fatality or significant environmental impact is very small. TQ considers that the local emergency services are the most appropriate organisations to manage incidents which could affect the environmental assets and public safety along the route. TQ will consult with local emergency services to ensure that adequate processes and resources are in place to respond to such an incident should it occur. TQ will develop a range of emergency response and management plans as part of the detailed design stage. These plans will be developed in consultation with local emergency services to further address these environmental and public safety risks.

7.1.3 Transport Costs

The main purpose of the transport economics criterion as part of the route assessment is to compare the relative costs of several potential routes. In this case, subjective factors dictate that only one route inbound and one route outbound are feasible; therefore the route cost comparison is redundant. Nevertheless a preliminary assessment has been undertaken which shows that the transport costs of operating the prescribed inbound and outbound routes are negligible given their length and short duration. Operating costs are divided into two components.

- > Driver Wages (estimated at \$25 per hour)
- > Fuel Costs (\$1.30 per litre, tanker fuel use assumed to be 47L per hundred kilometres)

Costs for each leg of the route are calculated in **Table 7-8** below.

Table 7-8 Cost Calculations

Route Leg	Travel Time	Wages Cost Per Trip	Travel Distance	Fuel Use Per Trip	Fuel Cost Per Trip	Total Cost Per trip
Site to Princes Motorway via Masters Road	5 minutes	\$2.08	4.0km	1.88L	\$2.44	\$4.52
Site to Princes Motorway via Five Islands Road	10 minutes	\$4.16	7.0km	3.29L	\$4.28	\$8.44

Consequently it is considered that the preferred route has low costs and is suitable for its intended purpose in terms of transport economics.

8 Identification of Risk Management Measures

HIPAP 11 prescribes that risk management strategies should be considered when planning for the transportation of hazardous materials.

Risk management strategies have several aspects, including:

- > choice of the best routes;
- > identification of the main risk contributors;
- > identification and implementation of risk reduction measures;
- > measures to avoid avoidable risk;
- > adoption of the most cost beneficial safeguards; and
- > ensuring appropriate and comprehensive emergency plans.

In undertaking this assessment, Cardno have identified the preferred route to and from the Port Kembla Bulk Liquids Terminal based on a multi criteria environmental assessment and consideration of the local road hierarchy. The roads identified in these preferred routes, namely Springhill Road, Masters Road and Five Islands Road, already service Port Kembla and the existing industrial functions within the port. As such they have been designed and are currently utilised for the transportation of hazardous substances on an industrial scale. Therefore the preferred route requires no upgrades to perform this function safely and efficiently. Emergency services are already well located to respond to events on and around the proposed transport route. The preliminary economic analysis demonstrates that the preferred route option does not carry significant operating costs.

TQ will develop a range of emergency response and management plans as part of the detailed design stage. These plans will be developed through consultation with local emergency services to further address environmental and public safety risks. Consequently, no new physical mitigation measures are considered necessary to support the development proposal.

9 Summary & Conclusions

This assessment has reviewed a wide range of factors to identify and assess a suitable route for the transport of combustible and flammable liquids from the proposed Port Kembla Bulk Liquids Terminal.

- > Relatively few roads are rated for heavy vehicles in proximity to the site.
- > Of those roads which are rated for heavy vehicles, around half are unsuitable for the transport of dangerous goods due to the presence of vulnerable land uses and populations along their length.
- > The only remaining roads, Springhill Road, Masters Road and Five Islands Road are located in industrial precincts which already serve large volumes of industrial and hazardous goods traffic.
- > These roads have adequate road and traffic characteristics to support the transportation of dangerous goods. The intersections and carriageways which form these roads are operating at adequate levels of service. The carriageways themselves are designed for the carriage of large vehicles.
- > The accident rate calculated for the proposal's heavy vehicle operations along the preferred route is between 0.13 and 0.29 per year. There have been no fatal road accidents or hazardous accident spills of any kind during the 5 year study period on these roads. Considering this together with the accident rates, the probability of an accident occurring which would cause a fatality and/or lead to the spilling of combustible or flammable liquids as a result of the proposed development is very low.
- > Land Use and Environmental Risk is considered to be minimal given that the existing roads have large buffers which have removed or protected sensitive land uses from the impacts of industrial traffic.
- > The transport economics of the route are adequate and provide a low cost connection between the proposed terminal and existing motorway infrastructure.
- > Environmental assets and public safety along the proposed route is at minimal risk from the proposal. These risks will be addressed through consultation with emergency services and development of emergency response and management plans at detailed design stage.

Consequently, the proposed route is considered suitable in its current form and no additional mitigation measures are considered necessary.

Proposed Port Kembla Bulk Liquids
Terminal

APPENDIX

A

RMS TRAFFIC ACCIDENT REPORTS

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
Southern Region																								
Wollongong LGA																								
Coniston																								
Springhill Rd																								
828734	P	02/03/2013	Sat	17:50	5 m	N FIVE ISLANDS RD	TJN	STR	Raining	Wet	80	1	CAR	M18	W in FIVE ISLANDS RD	20	Turning right	NC	0	0	0	0	S	
E51202828							RUM:	81	Off left/rt bnd=>obj		Traffic island etc													
Cringila																								
Five Islands Rd																								
722983	P	05/09/2010	Sun	13:00		at LAKE AVE	TJN	CRV	Unk	Dry	80	2	CAR	M86	N in LAKE AVE	30	Turning right	NC	0	0	0	0		
E608144490							RUM:	13	Right near		CAR F48 W in FIVE ISLANDS RD 80 Proceeding in lane													
748560	P	15/04/2011	Fri	07:00		at LAKE AVE	TJN	STR	Fine	Dry	50	2	CAR	F32	W in FIVE ISLANDS RD	10	Proceeding in lane	NC	0	0	0	0		
E44462962							RUM:	30	Rear end		TRK M55 W in FIVE ISLANDS RD 10 Proceeding in lane													
774126	P	09/11/2011	Wed	17:50		at LAKE AVE	TJN	STR	Fine	Dry	80	3	WAG	M56	N in LAKE AVE	20	Turning left	MC	0	0	1	0		
E46480462							RUM:	16	Left near		WAG F53 W in FIVE ISLANDS RD 40 Proceeding in lane CAR F56 W in FIVE ISLANDS RD Unk Proceeding in lane													
776628	P	01/12/2011	Thu	19:55		at LAKE AVE	TJN	STR	Fine	Dry	80	2	CAR	F49	E in FIVE ISLANDS RD	15	Turning right	SC	0	1	0	0		
E174567595							RUM:	21	Right through		4WD M19 W in FIVE ISLANDS RD 80 Proceeding in lane													
846609	P	01/08/2013	Thu	10:30		at LAKE AVE	TJN	STR	Fine	Dry	80	2	CAR	M77	E in FIVE ISLANDS RD	40	Turning right	NC	0	0	0	0		
E51746637							RUM:	21	Right through		CAR M36 W in FIVE ISLANDS RD 70 Proceeding in lane													
1011732	P	06/12/2013	Fri	09:30		at LAKE AVE	TJN	STR	Fine	Dry	80	2	CAR	M85	E in FIVE ISLANDS RD	30	Turning right	NC	0	0	0	0		
E53158633							RUM:	21	Right through		CAR M57 W in FIVE ISLANDS RD 70 Proceeding in lane													
1028102	P	31/03/2014	Mon	06:55		at LAKE AVE	TJN	STR	Fine	Dry	50	2	4WD	M48	E in FIVE ISLANDS RD	40	Turning right	UC	0	0	0	0	2	
E55211639							RUM:	21	Right through		CAR F48 W in FIVE ISLANDS RD Unk Proceeding in lane													
705919	P	14/04/2010	Wed	07:09	75 m	E LAKE AVE	DIV	STR	Fine	Dry	80	3	TRK	M78	E in FIVE ISLANDS RD	55	Proceeding in lane	MC	0	0	1	0		
E151480495							RUM:	30	Rear end		UTE M39 E in FIVE ISLANDS RD 0 Stationary 4WD M29 E in FIVE ISLANDS RD 0 Stationary													
792046	P	13/03/2012	Tue	06:00	15 m	W LAKE AVE	2WY	STR	Fine	Wet	80	1	P/C	M50	E in FIVE ISLANDS RD		Proceeding in lane	OC	0	0	0	1	0	
E48600078							RUM:	74	On road-out of cont.															
707535	P	28/04/2010	Wed	16:40	50 m	W LAKE AVE	DIV	STR	Fine	Dry	70	3	CAR	M21	W in FIVE ISLANDS RD	50	Proceeding in lane	OC	0	0	0	1	0	
E40627411							RUM:	30	Rear end		CAR F20 W in FIVE ISLANDS RD 0 Stationary WAG M38 W in FIVE ISLANDS RD 0 Stationary													
768916	P	10/08/2011	Wed	12:45		at SPRING HILL RD	TJN	STR	Fine	Dry	80	1	M/C	M41	W in FIVE ISLANDS RD	30	Proceeding in lane	MC	0	0	1	0		
E46151867							RUM:	74	On road-out of cont.															

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
																							S F
809063	P	25/08/2012	Sat	22:15		at SPRING HILL RD	TJN	CRV	Fine	Dry	70	2	4WD	M47	W in FIVE ISLANDS RD	60	Proceeding in lane	NC	0	0	0	0	S
E50196655							RUM:	30	Rear end				4WD	F52	W in FIVE ISLANDS RD	15	Proceeding in lane						
701458	P	29/01/2010	Fri	12:50		at SPRINGHILL RD	TJN	STR	Fine	Dry	70	3	TRK	M44	W in FIVE ISLANDS RD	40	Proceeding in lane	NC	0	0	0	0	
E42082683							RUM:	30	Rear end				4WD	F32	W in FIVE ISLANDS RD	0	Stationary						
													CAR	F33	W in FIVE ISLANDS RD	0	Stationary						
789641	P	02/03/2012	Fri	22:10		at SPRINGHILL RD	TJN	STR	Fine	Dry	60	2	TRK	M25	W in FIVE ISLANDS RD	15	Turning right	NC	0	0	0	0	
E47212556							RUM:	21	Right through				WAG	M53	E in FIVE ISLANDS RD	60	Proceeding in lane						
796558	P	17/05/2012	Thu	11:00		at SPRINGHILL RD	TJN	STR	Fine	Dry	60	2	CAR	F57	S in SPRINGHILL RD	Unk	Turning left	NC	0	0	0	0	
E48520863							RUM:	16	Left near				CAR	M37	E in FIVE ISLANDS RD	50	Proceeding in lane						
840937	P	29/05/2013	Wed	12:55		at SPRINGHILL RD	TJN	STR	Fine	Dry	80	2	WAG	M30	S in SPRINGHILL RD	20	Turning right	NC	0	0	0	0	
E51723759							RUM:	36	Right turn sideswipe				SEM	M51	S in SPRINGHILL RD	20	Turning right						
1004229	P	31/10/2013	Thu	12:50		at SPRINGHILL RD	TJN	STR	Fine	Dry	80	1	CAR	M61	W in FIVE ISLANDS RD	40	Turning right	NC	0	0	0	0	S
E52984654							RUM:	81	Off left/rt bnd=>obj				Signal pole										
1005909	P	18/12/2013	Wed	08:25	10 m	E SPRINGHILL RD	TJN	STR	Fine	Dry	80	3	CAR	M48	W in FIVE ISLANDS RD	40	Proceeding in lane	NC	0	0	0	0	
E52395060							RUM:	30	Rear end				CAR	F U	W in FIVE ISLANDS RD	0	Stationary						
													CAR	F75	W in FIVE ISLANDS RD	0	Stationary						
1033966	P	19/06/2014	Thu	09:45	20 m	E SPRINGHILL RD	DIV	STR	Fine	Dry	80	2	P/C	M29	W in FIVE ISLANDS RD		Veering left	UC	0	0	0	0	1
E55949478							RUM:	35	Lane change left				TRK	M62	W in FIVE ISLANDS RD	40	Proceeding in lane						
711311	P	25/05/2010	Tue	08:00	50 m	E SPRINGHILL RD	DIV	STR	Fine	Dry	70	2	CAR	M50	W in FIVE ISLANDS RD	20	Veering right	NC	0	0	0	0	
E152447395							RUM:	34	Lane change right				CAR	F19	W in FIVE ISLANDS RD	60	Proceeding in lane						
733161	P	29/11/2010	Mon	18:30	160 m	E SPRINGHILL RD	DIV	STR	Raining	Wet	70	3	CAR	M47	E in FIVE ISLANDS RD	70	Veering right	OC	0	0	0	1	
E44924484							RUM:	34	Lane change right				CAR	M44	E in FIVE ISLANDS RD	Unk	Proceeding in lane						
													WAG	M18	E in FIVE ISLANDS RD	Unk	Proceeding in lane						
851695	P	03/09/2013	Tue	13:30	10 m	W SPRINGHILL RD	TJN	STR	Fine	Dry	70	3	CAR	F21	W in FIVE ISLANDS RD	40	Proceeding in lane	MC	0	0	2	0	
E52194114							RUM:	30	Rear end				UTE	M43	W in FIVE ISLANDS RD	20	Proceeding in lane						
													CAR	F26	W in FIVE ISLANDS RD	0	Stationary						
740096	P	31/01/2011	Mon	13:30	100 m	W SPRINGHILL RD	DIV	CRV	Fine	Dry	80	2	CAR	M23	W in FIVE ISLANDS RD	20	Proceeding in lane	NC	0	0	0	0	
E43063915							RUM:	30	Rear end				CAR	M18	W in FIVE ISLANDS RD	5	Proceeding in lane						
754488	P	30/05/2011	Mon	09:20	130 m	W SPRINGHILL RD	DIV	CRV	Raining	Wet	80	1	CAR	F26	W in FIVE ISLANDS RD	70	Proceeding in lane	SC	0	1	0	0	S
E44645148							RUM:	80	Off left/right bend														
790251	P	05/04/2012	Thu	08:10	245 m	W SPRINGHILL RD	DIV	STR	Fine	Dry	80	2	CAR	M72	E in FIVE ISLANDS RD	15	Turning right	SC	0	1	1	0	
E47606459							RUM:	21	Right through				M/C	M30	W in FIVE ISLANDS RD	80	Proceeding in lane						
842046	P	30/04/2013	Tue	05:20	500 m	W SPRINGHILL RD	DIV	STR	Raining	Wet	80	1	CAR	M34	W in FIVE ISLANDS RD	80	Proceeding in lane	SC	0	1	0	0	
E51503019							RUM:	71	Off rd left => obj				Utility pole										F
Lake Ave																							

Lake Ave

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
800254	P	26/04/2012	Thu	15:00	5 m	S FIVE ISLANDS RD	TJN	STR	Fine	Dry	50	2	OMV	U U	N in LAKE AVE	Unk	Proceeding in lane	MC	0	0	1	0	0
E48852063							RUM:	30	Rear end				CAR	F25	N in LAKE AVE	0	Stationary						
Spring Hill																							
Five Islands Rd																							
789323	P	20/03/2012	Tue	17:50	200 m	W GLASTONBURY AVE	DIV	STR	Fine	Dry	80	2	CAR	F23	W in FIVE ISLANDS RD	80	Proceeding in lane	OC	0	0	0	1	0
E47763168							RUM:	60	Parked				CAR	F45	W in FIVE ISLANDS RD	0	Parked						
1027421	P	08/06/2014	Sun	18:40		at LAKE AVE	TJN	STR	Fine	Dry	80	3	CAR	M26	S in FIVE ISLANDS RD	80	Other forward	UC	0	0	0	0	1
E55445268							RUM:	49	Other manoeuvring				CAR	M19	E in FIVE ISLANDS RD	5	Turning right						
													4WD	M24	E in FIVE ISLANDS RD	Unk	Turning right						
755968	P	25/05/2011	Wed	16:10		at SPRINGHILL RD	TJN	STR	Raining	Wet	60	2	CAR	F58	W in FIVE ISLANDS RD	20	Turning right	SC	0	1	0	0	0
E44636559							RUM:	21	Right through				CAR	M29	E in FIVE ISLANDS RD	50	Proceeding in lane						
816122	P	10/10/2012	Wed	08:20	200 m	W SPRINGHILL RD	DIV	CRV	Fine	Dry	80	2	CAR	F23	E in FIVE ISLANDS RD	80	Proceeding in lane	NC	0	0	0	0	0
E49211272							RUM:	30	Rear end				TRK	F52	E in FIVE ISLANDS RD	Unk	Proceeding in lane						
705572	P	06/04/2010	Tue	18:00	1 km	W SPRINGHILL RD	DIV	CRV	Raining	Wet	70	2	CAR	F59	E in FIVE ISLANDS RD	Unk	Proceeding in lane	OC	0	0	0	1	0
E40077909							RUM:	30	Rear end				CAR	F U	E in FIVE ISLANDS RD	50	Proceeding in lane						
Unanderra																							
Five Islands Rd																							
787784	P	08/02/2012	Wed	21:50	2 m	W GALSTONBURY AVE	RDB	STR	Raining	Wet	70	1	WAG	M33	E in FIVE ISLANDS RD	40	Perform U-turn	NC	0	0	0	0	0
E151663898							RUM:	41	U turn into object				Utility pole										
762813	P	27/07/2011	Wed	16:00		at GLADSTONBURY AVE	RDB	STR	Fine	Dry	70	3	SEM	M44	W in FIVE ISLANDS RD	70	Proceeding in lane	NC	0	0	0	0	0
E44954714							RUM:	30	Rear end				CAR	M46	W in FIVE ISLANDS RD	10	Proceeding in lane						
													CAR	F41	N in GLADSTONBURY AVE	0	Wait turn right						
735199	P	11/12/2010	Sat	10:10		at GLASTONBURY AVE	RDB	STR	Fine	Dry	60	2	SEM	M47	E in GLASTONBURY AVE	5	Veering left	NC	0	0	0	0	0
E620676690							RUM:	35	Lane change left				TRK	M32	E in GLASTONBURY AVE	5	Proceeding in lane						
748000	P	25/03/2011	Fri	12:00		at GLASTONBURY AVE	RDB	STR	Fine	Dry	80	1	CAR	M76	E in FIVE ISLANDS RD	60	Proceeding in lane	NC	0	0	0	0	0
E44540742							RUM:	72	Off road to right														
753681	P	23/05/2011	Mon	08:45		at GLASTONBURY AVE	RDB	STR	Fine	Dry	80	2	4WD	F35	E in FIVE ISLANDS RD	30	Proceeding in lane	OC	0	0	0	1	0
E44914551							RUM:	30	Rear end				4WD	F62	E in FIVE ISLANDS RD	0	Stationary						
759682	P	09/06/2011	Thu	11:30		at GLASTONBURY AVE	RDB	STR	Fine	Dry	60	2	SEM	M60	N in GLASTONBURY AVE	10	Turning left	NC	0	0	0	0	0
E45209443							RUM:	37	Left turn sideswipe				CAR	F29	N in GLASTONBURY AVE	15	Proceeding in lane						
801696	P	28/06/2012	Thu	08:35		at GLASTONBURY AVE	RDB	STR	Fine	Dry	80	2	CAR	F71	N in GLASTONBURY AVE	20	Turning right	NC	0	0	0	0	0
E48804271							RUM:	11	Right far				BDBL	M48	E in FIVE ISLANDS RD	15	Proceeding in lane						
718444	P	22/07/2010	Thu	12:10	12 m	E GLASTONBURY AVE	DIV	STR	Fine	Dry	80	2	CAR	F63	E in FIVE ISLANDS RD	10	Proceeding in lane	MC	0	0	1	0	0
E41434032							RUM:	30	Rear end				CAR	F62	E in FIVE ISLANDS RD	0	Stationary						

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
S F																								
798537 P	08/05/2012	Tue	15:05	20 m	E	GLASTONBURY AVE	DIV	STR	Fine	Dry	50	2	TRK	M45	W in FIVE ISLANDS RD	5	Proceeding in lane	SC	0	1	0	0	0	
E92564102							RUM:	30	Rear end				BDBL	M58	W in FIVE ISLANDS RD	0	Stationary							
784021 P	21/10/2011	Fri	15:30	60 m	E	GLASTONBURY AVE	DIV	STR	Fine	Dry	60	4	CAR	M18	W in FIVE ISLANDS RD	20	Proceeding in lane	NC	0	0	0	0	0	
E88932901							RUM:	30	Rear end				WAG	M18	W in FIVE ISLANDS RD	0	Stationary							
													CAR	M20	W in FIVE ISLANDS RD	0	Stationary							
													WAG	M48	W in FIVE ISLANDS RD	0	Stationary							
834353 P	19/04/2013	Fri	15:40	100 m	E	GLASTONBURY AVE	DIV	STR	Fine	Dry	80	3	LOR	M38	W in FIVE ISLANDS RD	60	Proceeding in lane	MC	0	0	1	0	0	
E51798151							RUM:	30	Rear end				CAR	M47	W in FIVE ISLANDS RD	0	Stationary							
													CAR	M25	W in FIVE ISLANDS RD	0	Stationary							
1052322 P	09/12/2014	Tue	15:20	50 m	N	GLASTONBURY AVE	DIV	STR	Overcast	Dry	80	2	CAR	F50	S in FIVE ISLANDS RD	Unk	Proceeding in lane	UC	0	0	0	0	1	
E55359610							RUM:	30	Rear end				LOR	M55	S in FIVE ISLANDS RD	10	Proceeding in lane							
1011045 P	11/02/2014	Tue	15:30	50 m	W	GLASTONBURY AVE	DIV	STR	Fine	Dry	80	2	CAR	M31	E in FIVE ISLANDS RD	35	Proceeding in lane	UC	0	0	0	0	1	
E54168431							RUM:	30	Rear end				CAR	F22	E in FIVE ISLANDS RD	0	Stationary							
803510 P	17/07/2012	Tue	15:49	200 m	W	GLASTONBURY AVE	DIV	STR	Fine	Dry	80	2	CAR	M36	W in FIVE ISLANDS RD	30	Proceeding in lane	NC	0	0	0	0	0	
E48518304							RUM:	30	Rear end				LOR	M87	W in FIVE ISLANDS RD	5	Proceeding in lane							
706762 P	16/04/2010	Fri	22:15		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	M18	E in FIVE ISLANDS RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
E40767221							RUM:	10	Cross traffic				CAR	F30	S in SOUTHERN EXP	Unk	Proceeding in lane							
749038 P	16/03/2011	Wed	06:20		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	M56	E in FIVE ISLANDS RD	15	Turning right	MC	0	0	1	0	0	
E44039821							RUM:	21	Right through				4WD	M48	W in FIVE ISLANDS RD	60	Proceeding in lane							
754716 P	06/05/2011	Fri	06:20		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	F20	E in FIVE ISLANDS RD	10	Turning right	NC	0	0	0	0	0	
E85825402							RUM:	21	Right through				LOR	M58	W in FIVE ISLANDS RD	50	Proceeding in lane							
763151 P	07/08/2011	Sun	18:15		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	M65	W in FIVE ISLANDS RD	80	Other forward	SC	0	1	0	0	0	
E44994324							RUM:	29	Other opposing				WAG	M24	E in FIVE ISLANDS RD	30	Other forward							
769074 P	12/09/2011	Mon	23:30		at	SOUTHERN EXP	TJN	STR	Fine	Dry	70	2	4WD	M49	S in SOUTHERN EXP	30	Turning right	NC	0	0	0	0	0	
E45659056							RUM:	13	Right near				CAR	M22	E in FIVE ISLANDS RD	50	Proceeding in lane							
775511 P	14/10/2011	Fri	19:38		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	4WD	F46	E in FIVE ISLANDS RD	10	Turning right	NC	0	0	0	0	0	
E46007412							RUM:	21	Right through				CAR	F21	W in FIVE ISLANDS RD	50	Proceeding in lane							
778824 P	17/10/2011	Mon	19:50		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	F19	E in FIVE ISLANDS RD	20	Turning right	NC	0	0	0	0	0	
E48603886							RUM:	21	Right through				CAR	M25	W in FIVE ISLANDS RD	Unk	Proceeding in lane							
792540 P	24/04/2012	Tue	15:45		at	SOUTHERN EXP	TJN	STR	Fine	Dry	60	2	TRK	M20	E in FIVE ISLANDS RD	20	Turning right	NC	0	0	0	0	0	
E46891860							RUM:	21	Right through				CAR	M67	W in FIVE ISLANDS RD	40	Proceeding in lane							
832248 P	23/03/2013	Sat	13:50		at	SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	UTE	M24	S in SOUTHERN EXP	50	Turning right	NC	0	0	0	0	0	
E179610396							RUM:	11	Right far				VAN	M52	W in FIVE ISLANDS RD	60	Proceeding in lane							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
SF																								
843311	P	25/05/2013	Sat	18:25		at SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	UTE	M57	S in SOUTHERN EXP	15	Turning right	MC	0	0	1	1	0	
E54015783							RUM:	13	Right near				CAR	F41	E in FIVE ISLANDS RD	80	Proceeding in lane							
844318	P	08/07/2013	Mon	20:33		at SOUTHERN EXP	TJN	STR	Fine	Dry	70	2	M/C	M33	E in FIVE ISLANDS RD	30	Turning right	MC	0	0	1	0	0	
E52301549							RUM:	21	Right through				CAR	M59	W in FIVE ISLANDS RD	30	Proceeding in lane							
852569	P	03/09/2013	Tue	16:10		at SOUTHERN EXP	TJN	STR	Fine	Dry	80	2	CAR	M27	E in FIVE ISLANDS RD	30	Turning right	NC	0	0	0	0	0	
E51465260							RUM:	21	Right through				CAR	M26	W in FIVE ISLANDS RD	50	Proceeding in lane							
731375	P	01/11/2010	Mon	21:15	5 m	W SOUTHERN EXP	TJN	STR	Raining	Wet	60	2	CAR	M75	E in FIVE ISLANDS RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
E42329675							RUM:	32	Right rear				CAR	F54	E in FIVE ISLANDS RD	0	Wait turn right							
1049018	P	14/07/2014	Mon	08:25	15 m	W SOUTHERN EXP	DIV	STR	Fine	Dry	80	4	CAR	F22	E in FIVE ISLANDS RD	45	Proceeding in lane	NC	0	0	0	0	0	
E55023606							RUM:	30	Rear end				CAR	F37	E in FIVE ISLANDS RD	0	Stationary							
													CAR	M34	E in FIVE ISLANDS RD	0	Stationary							
													WAG	M38	E in FIVE ISLANDS RD	0	Stationary							
808819	P	05/09/2012	Wed	08:20	200 m	E SOUTHERN EXPRE OP	DIV	STR	Fine	Dry	80	2	WAG	F20	E in FIVE ISLANDS RD	60	Proceeding in lane	NC	0	0	0	0	0	
E48742022							RUM:	30	Rear end				CAR	F18	E in FIVE ISLANDS RD	0	Stationary							
1048853	P	06/11/2014	Thu	20:50	35 m	E SOUTHERN EXPRESSWAY	DIV	STR	Fine	Dry	80	3	CAR	F18	W in FIVE ISLANDS RD	60	Proceeding in lane	UC	0	0	0	0	1	
E109323102							RUM:	30	Rear end				CAR	M56	W in FIVE ISLANDS RD	Unk	Proceeding in lane							
													4WD	F39	W in FIVE ISLANDS RD	Unk	Proceeding in lane							
801112	P	03/06/2012	Sun	16:00	200 m	W SPRINGHILL RD	DIV	CRV	Overcast	Wet	80	1	CAR	M21	W in FIVE ISLANDS RD	80	Proceeding in lane	NC	0	0	0	0	0	S
E414012491							RUM:	81	Off left/rt bnd=>obj				Signpost											
1016039	P	27/02/2014	Thu	15:00	180 m	E WAYNOTE PL	2WY	STR	Fine	Dry	80	1	M/C	M46	W in FIVE ISLANDS RD	60	Proceeding in lane	UC	0	0	0	0	1	
E53685525							RUM:	74	On road-out of cont.															
Glastonbury Ave																								
753188	P	09/05/2011	Mon	09:30	5 m	S FIVE ISLANDS RD	RDB	STR	Fine	Dry	50	2	SEM	M60	N in GLASTONBURY AVE	20	Veering left	NC	0	0	0	0	0	
E44469634							RUM:	35	Lane change left				CAR	F19	N in GLASTONBURY AVE	0	Waiting turn left							
Southern Exp																								
1046854	P	25/09/2014	Thu	13:29	10 m	N FIVE ISLANDS RD	TJN	STR	Fine	Dry	80	3	TRK	M73	S in SOUTHERN EXP	100	Proceeding in lane	UC	0	0	0	0	2	S
E107823401							RUM:	30	Rear end				CAR	M50	S in SOUTHERN EXP	0	Stationary							
													TRK	M56	S in SOUTHERN EXP	0	Waiting turn left							

Report Totals: Crashes: 67 Fatal Crashes(FC): 0 Serious Injury Crashes(SC): 7 Moderate Injury Crashes(MC): 10 Minor/Other Injury Crashes(OC): 8 Uncategorised Injury Crashes(UC): 8 Non-Casualty Crashes(NC): 34
 Killed(K): 0 Seriously Injured(S): 7 Moderately Injured(M): 12 Minor/Other Injured(O): 9 Uncategorised Injured(U): 10

Crashid dataset Five Islands Rd - M1 Princes Motorway to Springhill Road

Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data. For further information refer to Data Manual or report provider.

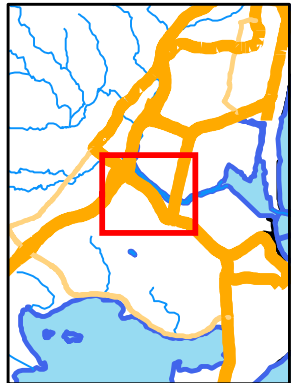
LOCATION

Five Islands Rd
M1 Princes Motorway
to Springhill Road

Data Period
1 Jan 2010 to 31 Dec 2014

Legend

- Fatal
- Injury
- Non-casualty
- State Road
- Regional Road



Prepared 29/09/2015
Network Optimisation
Outer Metro, Southern



Generated: 30/09/2015 08:24

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors			
Southern Region																										
Wollongong LGA																										
Figtree																										
Masters Rd																										
837212	P	06/05/2013	Mon	17:45	300 m	S THE AVENUE AVE	DIV	CRV	Fine	Dry	80	1	CAR	M28	W in MASTERS RD	110	Proceeding in lane	SC	0	1	0	0	0	S		
E51126514							RUM:	83	Off rt/rt bnd=>obj				Embankment													
1007225	P	17/01/2014	Fri	10:30		at THE AVENUE MS	TJN	STR	Fine	Dry	50	2	CAR	M32	N in MASTERS RD	40	Proceeding in lane	NC	0	0	0	0	0			
E53867219							RUM:	10	Cross traffic				CAR	M78	E in THE AVENUE MS	50	Proceeding in lane									
Mount Saint Thomas																										
Masters Rd																										
1026914	P	05/06/2014	Thu	09:00		at THE AVENUE MS	TJN	STR	Raining	Wet	50	2	CAR	F43	E in THE AVENUE MS	60	Turning right	NC	0	0	0	0	0	S		
E55805316							RUM:	21	Right through				CAR	M39	W in THE AVENUE MS	Unk	Proceeding in lane									
Mt St Thomas																										
Masters Rd																										
746735	P	02/02/2011	Wed	07:50	150 m	W DRUMMOND ST	DIV	STR	Fine	Dry	80	2	SEM	M53	E in MASTERS RD	70	Veering left	NC	0	0	0	0	0			
E43578026							RUM:	35	Lane change left				CAR	F33	E in MASTERS RD	80	Proceeding in lane									
775728	P	24/11/2011	Thu	11:30	1.2 km	W SPRINGHILL RD	DIV	CRV	Unk	Wet	80	1	TRK	M28	E in MASTERS RD	75	Proceeding in lane	NC	0	0	0	0	0	S		
E46099222							RUM:	87	Off lft/lft bnd=>obj				Fence (prior to 2014)													
Spring Hill																										
Masters Rd																										
1001152	P	19/09/2013	Thu	15:45	10 m	W DRUMMOND ST	TJN	STR	Fine	Dry	80	2	TRK	M42	E in MASTERS RD	80	Veering right	NC	0	0	0	0	0			
E51838530							RUM:	34	Lane change right				CAR	M23	E in MASTERS RD	80	Proceeding in lane									
1019550	P	24/03/2014	Mon	11:45	100 m	W DRUMMOND ST	DIV	STR	Raining	Wet	80	2	CAR	M39	W in MASTERS RD	75	Proceeding in lane	UC	0	0	0	0	0	1		
E54086923							RUM:	30	Rear end				CAR	F29	W in MASTERS RD	55	Proceeding in lane									
1030890	P	30/06/2014	Mon	08:40	100 m	W DRUMMOND ST	DIV	STR	Fine	Dry	80	2	CAR	F52	E in MASTERS RD	70	Proceeding in lane	NC	0	0	0	0	0			
E55938741							RUM:	66	Object on road				SEM	M57	E in MASTERS RD	60	Proceeding in lane									
														Other non fixed object												
756314	P	30/04/2011	Sat	04:40	500 m	E SOUTHERN EXP	OTH	CRV	Raining	Wet	80	1	TRK	M42	E in MASTERS RD	75	Proceeding in lane	NC	0	0	0	0	0	S		
E44277954							RUM:	87	Off lft/lft bnd=>obj				Fence (prior to 2014)													
716929	P	02/07/2010	Fri	16:45	140 m	W SPRINGHILL RD	OTH	CRV	Fine	Dry	80	2	CAR	F35	W in MASTERS RD	60	Proceeding in lane	MC	0	0	1	0	0			
E41210523							RUM:	30	Rear end				CAR	M28	W in MASTERS RD	0	Stationary									

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
S F																							
809537 P E48560925	06/09/2012	Thu	12:20	300 m	W	SPRINGHILL RD	DIV	STR	Fine	Dry	80	3	UTE	M45	W in MASTERS RD	60	Proceeding in lane	NC	0	0	0	0	0
							RUM:	30	Rear end				CAR	F52	W in MASTERS RD	0	Stationary						
													CAR		W in MASTERS RD	0	Parked						
1025951 P E55408942	29/05/2014	Thu	14:35	500 m	W	SPRINGHILL RD	DIV	STR	Fine	Dry	80	3	LOR	M52	W in MASTERS RD	60	Proceeding in lane	NC	0	0	0	0	0
							RUM:	30	Rear end				TRK	M36	W in MASTERS RD	0	Stationary						
													TRK	F38	W in MASTERS RD	0	Stationary						
739001 P E43347304	15/01/2011	Sat	11:20	400 m	S	THE AVENUE MS	OTH	CRV	Fine	Dry	80	2	CAR	M79	S in MASTERS RD	75	Incorrect side	SC	0	1	1	0	0
							RUM:	20	Head on				WAG	M45	N in MASTERS RD	75	Proceeding in lane						
1023029 P E54528548	08/04/2014	Tue	10:16			at THE AVENUE TO	OTH	CRV	Fine	Dry	80	2	CAR	F57	S in MASTERS RD	5	Veering right	UC	0	0	0	0	1
							RUM:	34	Lane change right				LOR	M25	S in MASTERS RD	75	Proceeding in lane						

Report Totals: Crashes: 14 Fatal Crashes(FC): 0 Serious Injury Crashes(SC):2 Moderate Injury Crashes(MC): 1 Minor/Other Injury Crashes(OC): 0 Uncategorised Injury Crashes(UC): 2 Non-Casualty Crashes(NC): 9
 Killed(K): 0 Seriously Injured(S): 2 Moderately Injured(M): 2 Minor/Other Injured(O): 0 Uncategorised Injured(U): 2

Crashid dataset Masters Road

Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data. For further information refer to Data Manual or report provider.

LOCATION
Masters Road,
Mount St Thomas

Data Period
1 Jan 2010 to 31 Dec 2014

Legend

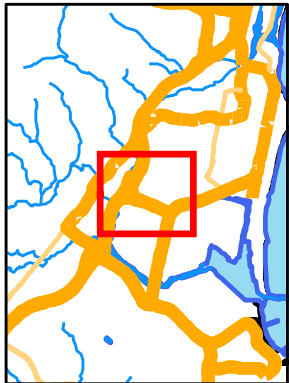
Fatal

Injury

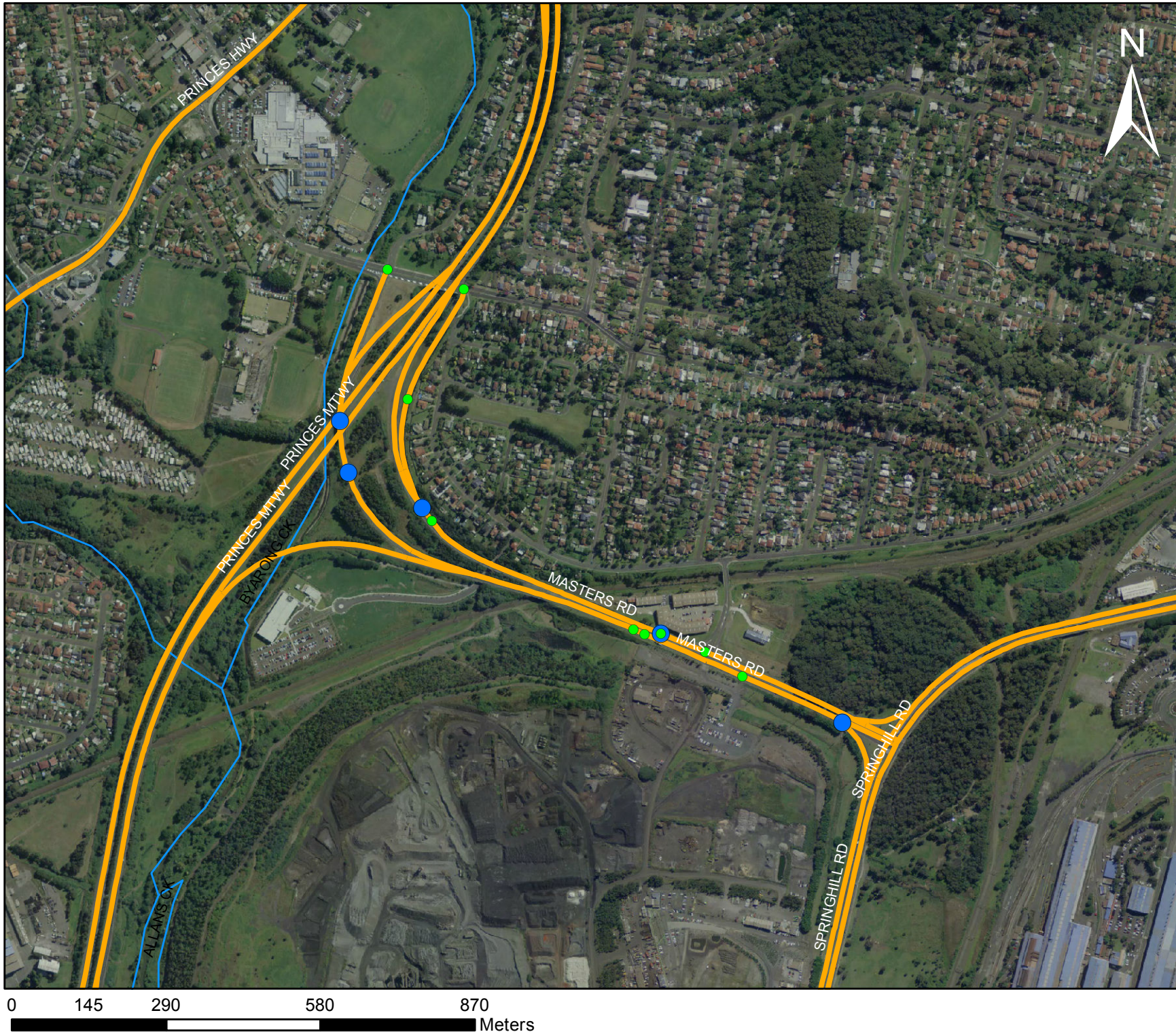
Non-casualty

State Road

Regional Road



Prepared 29/09/2015
Network Optimisation
Outer Metro, Southern



Summary Crash Report

# Crash Type			Contributing Factors			Crash Movement			CRASHES			14	CASUALTIES			6						
Car Crash	11	78.6%	Speeding	4	28.6%	Intersection, adjacent approaches	1	7.1%	Fatal	0	0.0%	Killed	0	0.0%								
Light Truck Crash	4	28.6%	Fatigue	0	0.0%	Head-on (not overtaking)	1	7.1%	Serious inj.	2	14.3%	Seriously inj.	2	33.3%								
Rigid Truck Crash	2	14.3%				Opposing vehicles; turning	1	7.1%	Moderate inj.	1	7.1%	Moderately inj.	2	33.3%								
Articulated Truck Crash	2	14.3%				U-turn	0	0.0%	Minor/Other inj.	0	0.0%	Minor/Other inj.	0	0.0%								
'Heavy Truck Crash	(4)	(28.6%)				Rear-end	4	28.6%	Uncategorised inj.	2	14.3%	Uncategorised inj.	2	33.3%								
Bus Crash	0	0.0%				Lane change	3	21.4%	Non-casualty	9	64.3%	^ Unrestrained	0	0.0%								
"Heavy Vehicle Crash	(4)	(28.6%)				Parallel lanes; turning	0	0.0%	Self Reported Crash			0	0%	^ Belt fitted but not worn, No restraint fitted to position OR No helmet worn								
Emergency Vehicle Crash	0	0.0%				Vehicle leaving driveway	0	0.0%	Time Group			% of Day			Crashes			Casualties				
Motorcycle Crash	0	0.0%				Overtaking; same direction	0	0.0%	00:01 - 02:59			0	0.0%	12.5%	6	2014	2					
Pedal Cycle Crash	0	0.0%				Hit parked vehicle	0	0.0%	03:00 - 04:59			1	7.1%	8.3%	2	2013	1					
Pedestrian Crash	0	0.0%				Hit railway train	0	0.0%	05:00 - 05:59			0	0.0%	4.2%	1	2012	0					
' Rigid or Artic. Truck " Heavy Truck or Heavy Bus # These categories are NOT mutually exclusive			Road Surface Condition			Permanent obstruction on road	0	0.0%	06:00 - 06:59			0	0.0%	4.2%	4	2011	2					
			Wet	4	28.6%	Hit animal	0	0.0%	07:00 - 07:59			1	7.1%	4.2%	1	2010	1					
Location Type			Dry	10	71.4%	Off road, on straight	0	0.0%	08:00 - 08:59			1	7.1%	4.2%								
*Intersection	3	21.4%	Snow or ice	0	0.0%	Off road on straight, hit object	0	0.0%	09:00 - 09:59			1	7.1%	4.2%								
Non intersection	11	78.6%	Natural Lighting			Out of control on straight	0	0.0%	10:00 - 10:59			2	14.3%	4.2%								
* Up to 10 metres from an intersection			Dawn	0	0.0%	Off road, on curve	0	0.0%	11:00 - 11:59			3	21.4%	4.2%								
			Daylight	12	85.7%	Off road on curve, hit object	3	21.4%	12:00 - 12:59			1	7.1%	4.2%								
Collision Type			Dusk	1	7.1%	Out of control on curve	0	0.0%	13:00 - 13:59			0	0.0%	4.2%								
Single Vehicle	3	21.4%	Darkness	1	7.1%	Other crash type	1	7.1%	14:00 - 14:59			1	7.1%	4.2%								
Multi Vehicle	11	78.6%							15:00 - 15:59			1	7.1%	4.2%								
Road Classification			Speed Limit						16:00 - 16:59			1	7.1%	4.2%								
Freeway/Motorway	0	0.0%	40 km/h or less	0	0.0%	80 km/h zone	12	85.7%	17:00 - 17:59			1	7.1%	4.2%								
State Highway	0	0.0%	50 km/h zone	2	14.3%	90 km/h zone	0	0.0%	18:00 - 18:59			0	0.0%	4.2%								
Other Classified Road	14	100.0%	60 km/h zone	0	0.0%	100 km/h zone	0	0.0%	19:00 - 19:59			0	0.0%	4.2%								
Unclassified Road	0	0.0%	70 km/h zone	0	0.0%	110 km/h zone	0	0.0%	20:00 - 21:59			0	0.0%	8.3%								
~ 07:30-09:30 or 14:30-17:00 on school days			~ 40km/h or less			0	0.0%	~ School Travel Time Involvement			5	35.7%	22:00 - 24:00			0	0.0%	8.3%				
Day of the Week									Street Lighting Off/Nil			% of Dark										
Monday	3	21.4%	Wednesday	1	7.1%	Friday	2	14.3%	Sunday	0	0.0%	WEEKEND	2	14.3%	0	of	1	in Dark	0.0%			
Tuesday	1	7.1%	Thursday	5	35.7%	Saturday	2	14.3%	WEEKDAY	12	85.7%											
#Holiday Periods																						
New Year	0	0.0%	Easter	0	0.0%	Queen's BD	0	0.0%	Christmas	0	0.0%	Easter SH	0	0.0%	Sept./Oct. SH	0	0.0%					
Aust. Day	0	0.0%	Anzac Day	0	0.0%	Labour Day	0	0.0%	January SH	2	14.3%	June/July SH	1	7.1%	December SH	0	0.0%					

Crashid dataset Masters Road

Note: Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data. For further information refer to Data Manual or report provider.

Percentages are percentages of all crashes. Unknown values for each category are not shown on this report.

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
Southern Region																								
Wollongong LGA																								
Coniston																								
Springhill Rd																								
727803	P	28/09/2010	Tue	07:45	300 m	N 21 DUMP ENTRY OT	DIV	STR	Fine	Dry	80	1	M/C	M27	N in SPRINGHILL RD	60	Proceeding in lane	SC	0	1	0	0	0	
E42605729							RUM:	74	On road-out of cont.															
739258	P	16/01/2011	Sun	03:44	150 m	S 21 DUMP ENTRY OT	DIV	STR	Fine	Dry	80	1	4WD	M45	S in SPRINGHILL RD	Unk	Proceeding in lane	NC	0	0	0	0	0	F
E43078275							RUM:	71	Off rd left => obj Fence (prior to 2014)															
796903	P	21/05/2012	Mon	09:20		at BLUE SCOPE STE ENT	DIV	STR	Fine	Dry	80	2	TRK	M51	E in SPRINGHILL RD	15	Turning right	NC	0	0	0	0	0	
E48764565							RUM:	21	Right through															
702841	P	23/02/2010	Tue	08:10	10 m	W BLUE SCOPE STE ENT	DIV	STR	Fine	Dry	80	4	CAR	M28	E in SPRINGHILL RD	80	Proceeding in lane	SC	0	1	0	0	0	
E42492588							RUM:	33	Lane sideswipe															
856251	P	25/09/2013	Wed	08:50	50 m	W BLUESCOPE STEE ENT	DIV	STR	Fine	Dry	80	3	WAG	F42	E in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E54817289							RUM:	30	Rear end															
716200	P	29/06/2010	Tue	17:30	25 m	W BRIDGE RD	DIV	STR	Fine	Dry	80	5	CAR	M20	W in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	
E41386105							RUM:	30	Rear end															
701678	P	03/03/2010	Wed	10:40		at BRIDGE ST	TJN	STR	Fine	Dry	80	3	TRK	M48	W in SPRINGHILL RD	20	Turning right	NC	0	0	0	0	0	
E40277204							RUM:	21	Right through															
723886	P	28/08/2010	Sat	13:00		at BRIDGE ST	TJN	STR	Fine	Dry	80	2	CAR	M17	W in SPRINGHILL RD	80	Proceeding in lane	SC	0	1	0	0	0	
E41612644							RUM:	39	Other same direction															
786095	P	15/12/2011	Thu	10:20		at BRIDGE ST	TJN	STR	Fine	Dry	80	2	4WD	M48	S in BRIDGE ST	20	Turning right	SC	0	1	0	0	0	
E46124224							RUM:	13	Right near															
787919	P	09/03/2012	Fri	10:50		at BRIDGE ST	TJN	STR	Fine	Dry	80	2	CAR	M39	S in BRIDGE ST	5	Turning right	NC	0	0	0	0	0	
E46587020							RUM:	13	Right near															
819936	P	21/09/2012	Fri	15:55		at BRIDGE ST	TJN	STR	Fine	Dry	80	2	TRK	M48	S in BRIDGE ST	40	Turning right	SC	0	1	0	0	0	
E94857901							RUM:	13	Right near															
1042176	P	12/09/2014	Fri	12:55		at BRIDGE ST	TJN	STR	Fine	Dry	80	2	CAR	F55	W in SPRINGHILL RD	10	Turning right	NC	0	0	0	0	0	
E55411724							RUM:	21	Right through															

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
806119 P E47869660	07/08/2012	Tue	07:45	50 m	S	BRIDGE ST	DIV RUM: 30	STR	Fine Rear end	Dry	60	4	CAR F43 N in SPRINGHILL RD CAR F19 N in SPRINGHILL RD CAR F37 N in SPRINGHILL RD CAR F36 N in SPRINGHILL RD	F43 N in SPRINGHILL RD F19 N in SPRINGHILL RD F37 N in SPRINGHILL RD F36 N in SPRINGHILL RD	20 Proceeding in lane 0 Stationary 0 Stationary 0 Stationary	Proceeding in lane	OC	0	0	0	1	0	
811956 P E48831956	17/08/2012	Fri	17:55	50 m	S	BRIDGE ST	DIV RUM: 35	STR	Fine Lane change left	Dry	80	4	CAR F22 N in SPRINGHILL RD VAN F34 N in SPRINGHILL RD CAR M48 N in SPRINGHILL RD CAR F20 N in SPRINGHILL RD	F22 N in SPRINGHILL RD F34 N in SPRINGHILL RD M48 N in SPRINGHILL RD F20 N in SPRINGHILL RD	80 Veering left 80 Proceeding in lane 80 Proceeding in lane 80 Proceeding in lane	Veering left	NC	0	0	0	0	0	
749907 P E44145847	20/04/2011	Wed	16:10	100 m	S	BRIDGE ST	DIV RUM: 30	STR	Raining Rear end	Wet	80	2	CAR F66 S in SPRINGHILL RD CAR M71 S in SPRINGHILL RD	F66 S in SPRINGHILL RD M71 S in SPRINGHILL RD	60 Proceeding in lane Unk Proceeding in lane	Proceeding in lane	NC	0	0	0	0	0	
771507 P E46037662	22/09/2011	Thu	08:40	200 m	S	BRIDGE ST	DIV RUM: 30	STR	Fine Rear end	Dry	80	3	CAR M48 N in SPRINGHILL RD CAR M30 N in SPRINGHILL RD CAR F23 N in SPRINGHILL RD	M48 N in SPRINGHILL RD M30 N in SPRINGHILL RD F23 N in SPRINGHILL RD	60 Proceeding in lane 0 Stationary 0 Stationary	Proceeding in lane	NC	0	0	0	0	0	
820815 P E49662906	29/11/2012	Thu	09:55	5 m	W	BRIDGE ST	TJN RUM: 30	STR	Fine Rear end	Dry	80	2	TRK M58 E in SPRINGHILL RD CAR M30 E in SPRINGHILL RD	M58 E in SPRINGHILL RD M30 E in SPRINGHILL RD	20 Proceeding in lane 10 Proceeding in lane	Proceeding in lane	NC	0	0	0	0	0	
758952 P E44799811	29/06/2011	Wed	16:50	10 m	W	BRIDGE ST	TJN RUM: 11	STR	Raining Right far	Wet	80	2	CAR M28 S in BRIDGE ST CAR M27 W in SPRINGHILL RD	M28 S in BRIDGE ST M27 W in SPRINGHILL RD	20 Turning right 0 Stationary	Turning right	NC	0	0	0	0	0	
714220 P E42036316	31/05/2010	Mon	11:00	20 m	W	BRIDGE ST	DIV RUM: 30	STR	Raining Rear end	Wet	80	3	CAR M43 E in SPRINGHILL RD CAR F51 E in SPRINGHILL RD CAR F28 E in SPRINGHILL RD	M43 E in SPRINGHILL RD F51 E in SPRINGHILL RD F28 E in SPRINGHILL RD	40 Proceeding in lane 0 Stationary 0 Stationary	Proceeding in lane	MC	0	0	1	0	0	
818229 P E49337415	24/11/2012	Sat	14:50	500 m	N	FIVE ISLANDS RD	DIV RUM: 30	STR	Fine Rear end	Dry	80	2	CAR M19 S in SPRINGHILL RD 4WD F37 S in SPRINGHILL RD	M19 S in SPRINGHILL RD F37 S in SPRINGHILL RD	80 Proceeding in lane Unk Proceeding in lane	Proceeding in lane	NC	0	0	0	0	0	
779779 P E45713825	24/10/2011	Mon	15:20	20 m	W	JOHN CLEARY PL	DIV RUM: 71	STR	Fine Off rd left => obj	Dry	80	1	CAR M28 W in SPRINGHILL RD	M28 W in SPRINGHILL RD	50 Proceeding in lane	Proceeding in lane	NC	0	0	0	0	0	
733966 P E43045907	01/12/2010	Wed	09:15	40 m	W	JOHN CLEARY PL	DIV RUM: 30	STR	Raining Rear end	Wet	80	2	CAR M55 E in SPRINGHILL RD CAR F59 E in SPRINGHILL RD	M55 E in SPRINGHILL RD F59 E in SPRINGHILL RD	40 Proceeding in lane 0 Stationary	Proceeding in lane	SC	0	1	0	0	0	
733967 P E43045907	01/12/2010	Wed	09:15	40 m	W	JOHN CLEARY PL	DIV RUM: 30	STR	Raining Rear end	Wet	80	3	CAR F29 E in SPRINGHILL RD CAR F31 E in SPRINGHILL RD CAR F55 E in SPRINGHILL RD	F29 E in SPRINGHILL RD F31 E in SPRINGHILL RD F55 E in SPRINGHILL RD	20 Proceeding in lane 0 Stationary 0 Stationary	Proceeding in lane	MC	0	0	1	0	0	
824619 P E96475001	12/12/2012	Wed	07:10	100 m	W	JOHN CLEARY PL	DIV RUM: 30	STR	Fine Rear end	Dry	70	3	CAR M45 E in SPRINGHILL RD 4WD F44 E in SPRINGHILL RD CAR M63 E in SPRINGHILL RD	M45 E in SPRINGHILL RD F44 E in SPRINGHILL RD M63 E in SPRINGHILL RD	70 Proceeding in lane 0 Stationary 0 Stationary	Proceeding in lane	OC	0	0	0	1	0	
704526 P E40422505	23/03/2010	Tue	22:30			at MASTERS RD	TJN RUM: 21	CRV	Fine Right through	Dry	80	2	CAR M20 S in SPRINGHILL RD VAN M53 N in SPRINGHILL RD	M20 S in SPRINGHILL RD M53 N in SPRINGHILL RD	10 Turning right 70 Proceeding in lane	Turning right	NC	0	0	0	0	0	

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
SF																								
733549	P	26/11/2010	Fri	20:05		at MASTERS RD	TJN	STR	Fine	Dry	80	2	CAR	M39	S in SPRINGHILL RD	50	Turning right	NC	0	0	0	0	0	
E42993531							RUM:	21	Right through				CAR	M25	N in SPRINGHILL RD	20	Proceeding in lane							
833274	P	06/04/2013	Sat	22:20		at MASTERS RD	TJN	STR	Fine	Dry	80	2	WAG	F33	S in SPRINGHILL RD	50	Turning right	MC	0	0	1	0	0	
E51032647							RUM:	21	Right through				CAR	M25	N in SPRINGHILL RD	80	Proceeding in lane							
740237	P	19/01/2011	Wed	17:15	20 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	4	CAR	F30	S in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	
E43366461							RUM:	30	Rear end				CAR	F42	S in SPRINGHILL RD	0	Stationary							
													CAR	F31	S in SPRINGHILL RD	50	Proceeding in lane							
													CAR	M18	S in SPRINGHILL RD	0	Stationary							
1037554	P	18/08/2014	Mon	09:10	500 m	N MASTERS RD	DIV	STR	Raining	Wet	80	3	CAR	M19	E in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	
E56095642							RUM:	30	Rear end				CAR	F39	E in SPRINGHILL RD	5	Proceeding in lane							
													TRK	M44	E in SPRINGHILL RD	0	Stationary							
842151	P	04/06/2013	Tue	08:52	800 m	N MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR	F19	N in SPRINGHILL RD	30	Proceeding in lane	NC	0	0	0	0	0	
E51904266							RUM:	30	Rear end				TRK	M33	N in SPRINGHILL RD	0	Stationary							
													CAR	F30	N in SPRINGHILL RD	0	Stationary							
825574	P	30/01/2013	Wed	08:35	100 m	S MASTERS RD	DIV	CRV	Fine	Dry	80	2	CAR	F21	N in SPRINGHILL RD	20	Proceeding in lane	OC	0	0	0	1	0	
E50612646							RUM:	30	Rear end				CAR	F57	N in SPRINGHILL RD	5	Proceeding in lane							
759349	P	05/07/2011	Tue	14:55	200 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR	M78	S in SPRINGHILL RD	60	Proceeding in lane	OC	0	0	0	2	0	
E47137184							RUM:	33	Lane sideswipe				LOR	M40	S in SPRINGHILL RD	65	Proceeding in lane							
													VAN	M53	N in SPRINGHILL RD	70	Proceeding in lane							
836815	P	17/05/2013	Fri	08:48	200 m	S MASTERS RD	DIV	STR	Fine	Dry	80	5	CAR	F20	N in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E51604661							RUM:	30	Rear end				WAG	F35	N in SPRINGHILL RD	0	Stationary							
													CAR	F20	N in SPRINGHILL RD	0	Stationary							
													CAR	F24	N in SPRINGHILL RD	0	Stationary							
													CAR	M62	N in SPRINGHILL RD	70	Proceeding in lane							
820694	P	10/10/2012	Wed	16:30	500 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR	M23	S in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E48577120							RUM:	30	Rear end				4WD	F36	S in SPRINGHILL RD	0	Stationary							
													WAG	F36	S in SPRINGHILL RD	0	Stationary							
726315	P	24/09/2010	Fri	15:05	50 m	W OLD SPRINGHILL RD	DIV	STR	Fine	Dry	80	2	CAR	F24	E in SPRINGHILL RD	80	Proceeding in lane	MC	0	0	1	0	0	
E81488801							RUM:	30	Rear end				OMV	M62	E in SPRINGHILL RD	0	Stationary							
711320	P	26/05/2010	Wed	06:55	200 m	W STEELWORKS ENT	DIV	STR	Overcast	Dry	80	5	CAR	M20	E in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E41224579							RUM:	30	Rear end				CAR	M61	E in SPRINGHILL RD	5	Proceeding in lane							
													CAR	M38	E in SPRINGHILL RD	0	Stationary							
													CAR	F47	E in SPRINGHILL RD	0	Stationary							
													CAR	M39	E in SPRINGHILL RD	50	Proceeding in lane							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
																							S F	
817617 P	08/11/2012	Thu	08:00		at	TOM THUMB RD	TJN	STR	Fine	Dry	60	2	CAR	M22	E in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E49313444							RUM:	30	Rear end				4WD	M39	E in SPRINGHILL RD	0	Stationary							
735131 P	08/12/2010	Wed	16:30	30 m	E	TOM THUMB RD	2WY	STR	Fine	Dry	80	2	4WD	F43	W in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E43139279							RUM:	30	Rear end				CAR	F22	W in SPRINGHILL RD	0	Stationary							
818159 P	21/11/2012	Wed	16:55	100 m	E	TOM THUMB RD	DIV	STR	Fine	Dry	80	2	CAR	M50	W in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E49538722							RUM:	30	Rear end				CAR	F49	W in SPRINGHILL RD	0	Stationary							
763910 P	15/08/2011	Mon	07:40	200 m	E	TOM THUMB RD	DIV	STR	Fine	Dry	Unk	3	CAR	M18	E in SPRINGHILL RD	75	Proceeding in lane	NC	0	0	0	0	0	
E45668662							RUM:	30	Rear end				CAR	M22	E in SPRINGHILL RD	0	Stationary							
													CAR	F30	W in SPRINGHILL RD	0	Stationary							
697416 P	29/01/2010	Fri	17:17	50 m	S	TOM THUMB RD	DIV	STR	Fine	Dry	80	3	CAR	M21	S in SPRINGHILL RD	20	Proceeding in lane	NC	0	0	0	0	0	
E76727602							RUM:	30	Rear end				CAR	F62	S in SPRINGHILL RD	0	Stationary							
													CAR	F50	S in SPRINGHILL RD	0	Stationary							
711046 P	19/05/2010	Wed	09:15	5 m	W	TOM THUMB RD	TJN	STR	Fine	Dry	80	2	CAR	F17	E in SPRINGHILL RD	80	Proceeding in lane	OC	0	0	0	1	0	
E134401197							RUM:	30	Rear end				CAR	F23	E in SPRINGHILL RD	0	Stationary							
1037958 P	19/08/2014	Tue	16:29	30 m	W	TOM THUMB RD	DIV	STR	Overcast	Wet	80	3	CAR	M39	E in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	
E56157767							RUM:	30	Rear end				CAR	M54	E in SPRINGHILL RD	65	Proceeding in lane							
													TRK	M56	E in SPRINGHILL RD	0	Stationary							
775962 P	20/10/2011	Thu	16:15	50 m	W	TOM THUMB RD	DIV	STR	Fine	Dry	80	2	CAR	F26	E in SPRINGHILL RD	30	Proceeding in lane	OC	0	0	0	1	0	
E45984813							RUM:	30	Rear end				TRK	M43	E in SPRINGHILL RD	0	Stationary							
801118 P	11/06/2012	Mon	13:20	100 m	W	TOM THUMB RD	DIV	STR	Raining	Wet	80	2	CAR	M48	E in SPRINGHILL RD	80	Veering left	SC	0	1	0	0	0	
E47358860							RUM:	35	Lane change left				CAR	F56	E in SPRINGHILL RD	80	Proceeding in lane							
848475 P	08/08/2013	Thu	15:40	40 m	E	TOMTHUMB RD	DIV	STR	Raining	Wet	80	4	CAR	M58	W in SPRINGHILL RD	60	Proceeding in lane	MC	0	0	1	0	0	
E52535062							RUM:	30	Rear end				CAR	M33	W in SPRINGHILL RD	0	Stationary							
													CAR	F57	W in SPRINGHILL RD	0	Stationary							
													UTE	M30	W in SPRINGHILL RD	0	Stationary							
Cringila																								
Springhill Rd																								
827086 P	17/02/2013	Sun	08:00	50 m	N	FIVE ISLANDS RD	OTH	CRV	Raining	Wet	80	1	CAR	F29	N in SPRINGHILL RD	40	Proceeding in lane	NC	0	0	0	0	0	S
E50524533							RUM:	86	Off left/left bend															
829166 P	28/02/2013	Thu	17:20	50 m	N	FIVE ISLANDS RD	DIV	STR	Raining	Wet	80	2	CAR	M68	S in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	
E242098793							RUM:	30	Rear end				CAR	F51	S in SPRINGHILL RD	0	Stationary							
767108 P	12/09/2011	Mon	14:45	145 m	N	FIVE ISLANDS RD	DIV	STR	Fine	Wet	80	2	CAR	F79	S in SPRINGHILL RD	50	Veering right	NC	0	0	0	0	0	
E45861240							RUM:	34	Lane change right				CAR	F58	S in SPRINGHILL RD	50	Proceeding in lane							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
																							SF	
775983	P	27/10/2011	Thu	14:40	145 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	SEM	M53	S in SPRINGHILL RD	80	Veering left	SC	0	1	0	0	0	
E45940227							RUM:	35	Lane change left				CAR	F31	S in SPRINGHILL RD	80	Proceeding in lane							
785590	P	25/02/2012	Sat	17:15	200 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	1	M/C	M22	N in SPRINGHILL RD	50	Proceeding in lane	SC	0	1	0	0	0	F
E49516383							RUM:	74	On road-out of cont.															
826181	P	25/01/2013	Fri	00:20	300 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	1	CAR	U U	N in SPRINGHILL RD	50	Proceeding in lane	NC	0	0	0	0	0	F
E53088288							RUM:	70	Off road to left															
734463	P	29/11/2010	Mon	15:30	500 m	N FIVE ISLANDS RD	DIV	STR	Raining	Wet	80	1	TRK	M40	N in SPRINGHILL RD	30	Proceeding in lane	MC	0	0	1	0	0	
E42259130							RUM:	71	Off rd left ==> obj				Utility pole											
837219	P	06/05/2013	Mon	08:00	500 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	TRK	M35	N in SPRINGHILL RD	Unk	Proceeding in lane	OC	0	0	0	1	0	
E51905443							RUM:	62	Accident				CAR	F19	N in SPRINGHILL RD	0	Broken down							
Mt St Thomas																								
Springhill Rd																								
743383	P	12/01/2011	Wed	08:20	300 m	S MASTERS RD	DIV	STR	Overcast	Dry	80	2	CAR	U U	S in SPRINGHILL RD	80	Proceeding in lane	MC	0	0	1	0	0	
E43105533							RUM:	33	Lane sideswipe				CAR	F78	S in SPRINGHILL RD	60	Proceeding in lane							
776370	P	04/10/2011	Tue	12:28	500 m	S MASTERS RD	DIV	STR	Fine	Dry	80	1	M/C	M26	N in SPRINGHILL RD	80	Proceeding in lane	SC	0	1	0	0	0	
E46098431							RUM:	70	Off road to left															
787789	P	14/02/2012	Tue	08:45	500 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR	F18	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E46884911							RUM:	30	Rear end				WAG	F49	N in SPRINGHILL RD	10	Proceeding in lane							
Port Kembla																								
Springhill Rd																								
849098	P	26/08/2013	Mon	10:55	100 m	S 21 DUMP ENTRY OT	DIV	STR	Fine	Dry	70	1	CAR	F24	S in SPRINGHILL RD	40	Proceeding in lane	NC	0	0	0	0	0	
E52969469							RUM:	66	Object on road				Other non fixed object											
1008853	P	07/11/2013	Thu	14:45	5 m	E BLUE SCOPE STEEL ENT	DIV	STR	Fine	Dry	50	2	4WD	M33	W in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	S
E53109321							RUM:	30	Rear end				CAR	F41	W in SPRINGHILL RD	Unk	Proceeding in lane							
828374	P	20/02/2013	Wed	11:30	400 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	60	2	CAR	M30	S in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E50452622							RUM:	30	Rear end				TRK	M17	S in SPRINGHILL RD	0	Stationary							
777888	P	24/10/2011	Mon	11:30	710 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	CAR	F62	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E45905532							RUM:	62	Accident				CAR	M37	N in SPRINGHILL RD	0	Broken down							
805024	P	25/07/2012	Wed	13:35		at JOHN CLEARY PL	TJN	STR	Fine	Dry	80	1	CAR	F28	W in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E50426380							RUM:	70	Off road to left															
1041749	P	25/08/2014	Mon	11:39	40 m	W JOHN CLEARY PL	DIV	STR	Fine	Dry	80	2	SEM	M69	W in SPRINGHILL RD	45	Veering left	NC	0	0	0	0	0	
E56477716							RUM:	35	Lane change left				CAR	M75	W in SPRINGHILL RD	15	Proceeding in lane							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
SF																							
1010073	P	06/02/2014	Thu	15:30	100 m	W JOHN CLEARY PL	DIV	STR	Fine	Dry	80	2	CAR	F54	S in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0
E53637527							RUM:	30	Rear end				CAR	F49	S in SPRINGHILL RD	30	Proceeding in lane						
743913	P	01/03/2011	Tue	16:30	5 m	N MASTERS RD	TJN	CRV	Fine	Dry	60	2	4WD	F29	S in SPRINGHILL RD	20	Proceeding in lane	OC	0	0	0	1	0
E44098329							RUM:	30	Rear end				CAR	M59	S in SPRINGHILL RD	0	Stationary						
1007923	P	21/12/2013	Sat	05:00		at TOM THUMB RD	TJN	STR	Fine	Dry	80	1	CAR	M31	W in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0
E53813373							RUM:	71	Off rd left => obj				Street furniture - Other										
1015342	P	13/03/2014	Thu	16:15	50 m	S TOM THUMB RD	DIV	STR	Fine	Dry	80	4	CAR	F28	W in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0
E54113912							RUM:	30	Rear end				WAG	M33	W in SPRINGHILL RD	0	Stationary						
													TRK	M52	W in SPRINGHILL RD	0	Stationary						
													CAR	F62	W in SPRINGHILL RD	0	Stationary						
756557	P	08/06/2011	Wed	17:15	50 m	W TOM THUMB RD	DIV	STR	Fine	Dry	80	2	CAR	M70	W in SPRINGHILL RD	60	Proceeding in lane	OC	0	0	0	1	0
E44679705							RUM:	30	Rear end				CAR	F21	W in SPRINGHILL RD	60	Proceeding in lane						
1009371	P	03/02/2014	Mon	16:15	50 m	W TOM THUMB RD	DIV	STR	Fine	Dry	80	3	UTE	M51	W in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0
E53407037							RUM:	60	Parked				CAR		W in SPRINGHILL RD	0	Parked						
													CAR		W in SPRINGHILL RD	0	Parked						
1028173	P	13/06/2014	Fri	17:15	50 m	W TOM THUMB RD	DIV	STR	Fine	Dry	80	3	CAR	M19	W in SPRINGHILL RD	60	Veering right	NC	0	0	0	0	0
E54654924							RUM:	30	Rear end				CAR	F39	W in SPRINGHILL RD	0	Stationary						
													CAR	F48	W in SPRINGHILL RD	0	Stationary						
759534	P	09/07/2011	Sat	18:00	100 m	W TOM THUMB RD	DIV	STR	Fine	Dry	80	1	CAR	F38	W in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0
E45596463							RUM:	67	Struck animal				Other large animal										
Spring Hill																							
Masters Rd																							
786350	P	15/02/2012	Wed	11:30	5 m	W SPRINGHILL RD	TJN	STR	Fine	Dry	80	2	CAR	F45	E in MASTERS RD	Unk	Proceeding in lane	OC	0	0	0	1	0
E47192821							RUM:	30	Rear end				CAR	F23	E in MASTERS RD	0	Stationary						
718084	P	28/06/2010	Mon	11:45	10 m	W SPRINGHILL RD	TJN	STR	Fine	Dry	80	2	SEM	M63	E in MASTERS RD	60	Proceeding in lane	NC	0	0	0	0	0
E41609349							RUM:	30	Rear end				SEM	M62	E in MASTERS RD	0	Stationary						
Springhill Rd																							
783669	P	02/02/2012	Thu	07:40		at 21 DUMP ENTRY ENT	DIV	STR	Raining	Wet	80	2	CAR	M17	N in SPRINGHILL RD	50	Proceeding in lane	MC	0	0	1	0	0
E47105940							RUM:	30	Rear end				CAR	M39	N in SPRINGHILL RD	30	Proceeding in lane						
799068	P	06/06/2012	Wed	10:15		at 21 DUMP ENTRY ENT	DIV	STR	Raining	Wet	80	2	BUS	M38	S in SPRINGHILL RD	20	Veering left	NC	0	0	0	0	0
E47418020							RUM:	35	Lane change left				CAR	M24	S in SPRINGHILL RD	80	Proceeding in lane						
837961	P	17/05/2013	Fri	08:45		at 21 DUMP ENTRY ENT	DIV	STR	Fine	Dry	80	2	CAR	F57	W in SPRINGHILL RD	20	Forward from drive	NC	0	0	0	0	0
E52798455							RUM:	47	Emerging from drive				4WD	M41	S in SPRINGHILL RD	65	Proceeding in lane						

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	
SF																								
785771	P	11/02/2012	Sat	06:05	5 m	S 21 DUMP ENTRY ENT	DIV	STR	Raining	Wet	80	2	CAR	F43	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E47195707							RUM: 30	Rear end					TRK	M32	N in SPRINGHILL RD	0	Stationary							
839562	P	24/05/2013	Fri	15:15	5 m	S 21 DUMP ENTRY ENT	DIV	STR	Raining	Wet	80	2	CAR	M84	N in SPRINGHILL RD	15	Proceeding in lane	SC	0	1	0	0	0	0
E53398380							RUM: 30	Rear end					4WD	F35	N in SPRINGHILL RD	0	Stationary							
791486	P	18/04/2012	Wed	07:15	50 m	N 21 DUMP ENTRY OT	DIV	STR	Overcast	Wet	80	1	CAR	M21	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	0
E47653676							RUM: 70	Off road to left																
778347	P	09/11/2011	Wed	06:10	50 m	S 21 DUMP ENTRY OT	DIV	STR	Fine	Dry	80	2	M/C	M25	N in SPRINGHILL RD	60	Proceeding in lane	SC	0	1	0	0	0	0
E45995322							RUM: 30	Rear end					TRK	M33	N in SPRINGHILL RD	5	Proceeding in lane							
1042602	P	22/09/2014	Mon	08:00	100 m	S 21 DUMP ENTRY OT	DIV	STR	Fine	Dry	80	2	VAN	M58	N in SPRINGHILL RD	70	Veering left	NC	0	0	0	0	0	0
E55447535							RUM: 35	Lane change left					CAR	F55	N in SPRINGHILL RD	30	Proceeding in lane							
757384	P	01/06/2011	Wed	17:10	200 m	S 21 DUMP ENTRY OT	DIV	STR	Overcast	Wet	80	3	TRK	M41	S in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	0
E44538633							RUM: 30	Rear end					CAR	F45	S in SPRINGHILL RD	20	Proceeding in lane							
													CAR	M77	S in SPRINGHILL RD	20	Proceeding in lane							
1026313	P	28/05/2014	Wed	09:25		at BLUE SCOPE STEEL ENT	2WY	STR	Fine	Dry	80	2	VAN	M43	S in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	0
E57190284							RUM: 30	Rear end					CAR	F45	S in SPRINGHILL RD	10	Proceeding in lane							
792258	P	10/04/2012	Tue	10:50	300 m	W BLUESCOPE STEE OT	DIV	CRV	Fine	Dry	80	2	CAR	M71	W in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	0
E47943277							RUM: 62	Accident					WAG		W in SPRINGHILL RD	0	Broken down							
768519	P	25/09/2011	Sun	10:30	15 m	N FIVE ISLANDS RD	OTH	CRV	Raining	Wet	80	1	CAR	F51	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	0
E45644011							RUM: 87	Off lft/lft bnd=>obj					Utility pole											S
758711	P	01/06/2011	Wed	17:23	50 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	4	CAR	F18	S in SPRINGHILL RD	75	Proceeding in lane	MC	0	0	1	2	0	
E44384552							RUM: 30	Rear end					CAR	F32	S in SPRINGHILL RD	40	Proceeding in lane							
													WAG	F51	S in SPRINGHILL RD	0	Stationary							
													CAR	F58	S in SPRINGHILL RD	0	Stationary							
1036172	P	12/08/2014	Tue	16:15	65 m	N FIVE ISLANDS RD	DIV	STR	Raining	Wet	80	2	CAR	M29	N in SPRINGHILL RD	65	Incorrect side	NC	0	0	0	0	0	0
E56424578							RUM: 20	Head on					CAR	M51	S in SPRINGHILL RD	0	Stationary							
784211	P	13/02/2012	Mon	16:10	150 m	N FIVE ISLANDS RD	DIV	STR	Raining	Wet	80	1	CAR	M25	S in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	0
E46263060							RUM: 74	On road-out of cont.																F
1048041	P	12/11/2014	Wed	14:01	200 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	1	WAG	U U	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	0
E56767829							RUM: 71	Off rd left => obj					Utility pole											
1038460	P	31/07/2014	Thu	10:10	500 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	CAR	M U	N in SPRINGHILL RD	80	Proceeding in lane	UC	0	0	0	0	0	2
E270203493							RUM: 30	Rear end					4WD	M U	N in SPRINGHILL RD	25	Proceeding in lane							
714731	P	22/06/2010	Tue	17:10	700 m	N FIVE ISLANDS RD	DIV	STR	Raining	Wet	80	2	CAR	F18	S in SPRINGHILL RD	10	Proceeding in lane	OC	0	0	0	1	0	
E41414321							RUM: 30	Rear end					CAR	F17	S in SPRINGHILL RD	0	Stationary							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors
SF																							
806920	P	26/07/2012	Thu	10:15	800 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	TRK	M37	S in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0
E48370723							RUM:	30	Rear end				CAR	M39	S in SPRINGHILL RD	0	Stationary						
776032	P	11/11/2011	Fri	07:20	900 m	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	TRK	M60	N in SPRINGHILL RD	80	Proceeding in lane	MC	0	0	2	0	0
E46301964							RUM:	60	Parked				OMV	M42	N in SPRINGHILL RD	0	Parked						
1055201	S	03/12/2014	Wed	09:00	1 km	N FIVE ISLANDS RD	DIV	STR	Fine	Dry	80	2	4WD	M66	N in SPRINGHILL RD	Unk	Proceeding in lane	NC	0	0	0	0	0
E57317439							RUM:	30	Rear end				CAR	M19	N in SPRINGHILL RD	Unk	Proceeding in lane						
1041161	P	19/08/2014	Tue	09:05	1.2 km	N FIVE ISLANDS RD	DIV	STR	Fine	Wet	50	3	CAR	M19	N in SPRINGHILL RD	Unk	Veering left	NC	0	0	0	0	0
E55435013							RUM:	35	Lane change left				CAR	F38	N in SPRINGHILL RD	Unk	Proceeding in lane						
													CAR	F25	N in SPRINGHILL RD	Unk	Proceeding in lane						
702056	P	11/02/2010	Thu	14:05		at MASTERS RD	TJN	STR	Fine	Dry	80	2	MOP	M55	E in MASTERS RD	Unk	Proceeding in lane	SC	0	1	1	0	0
E39671344							RUM:	10	Cross traffic				CAR	M31	S in SPRINGHILL RD	75	Proceeding in lane						
706516	P	07/04/2010	Wed	22:50		at MASTERS RD	TJN	CRV	Fine	Dry	80	2	CAR	F52	S in SPRINGHILL RD	10	Turning right	NC	0	0	0	0	0
E582319190							RUM:	21	Right through				CAR	M19	N in SPRINGHILL RD	80	Proceeding in lane						
713689	P	07/06/2010	Mon	21:05		at MASTERS RD	TJN	STR	Fine	Dry	80	2	CAR	F32	S in SPRINGHILL RD	50	Turning right	SC	0	1	1	1	0
E41458058							RUM:	21	Right through				CAR	M32	N in SPRINGHILL RD	75	Proceeding in lane						
761839	P	24/07/2011	Sun	11:10		at MASTERS RD	TJN	STR	Overcast	Dry	80	2	TRK	M25	N in SPRINGHILL RD	75	Proceeding in lane	MC	0	0	1	0	0
E156045796							RUM:	30	Rear end				WAG	M55	N in SPRINGHILL RD	0	Stationary						
781313	P	04/01/2012	Wed	18:25		at MASTERS RD	TJN	CRV	Fine	Dry	80	2	CAR	M32	S in SPRINGHILL RD	20	Turning right	OC	0	0	0	2	0
E46796046							RUM:	21	Right through				CAR	M48	N in SPRINGHILL RD	65	Proceeding in lane						
789643	P	04/03/2012	Sun	20:40		at MASTERS RD	TJN	CRV	Raining	Wet	80	1	CAR	F23	S in SPRINGHILL RD	80	Proceeding in lane	OC	0	0	0	1	0
E47806774							RUM:	87	Off lft/lft bnd=>obj				Utility pole										S
791763	P	28/03/2012	Wed	22:00		at MASTERS RD	TJN	STR	Fine	Dry	80	2	CAR	M30	S in SPRINGHILL RD	5	Turning right	MC	0	0	1	0	0
E47160652							RUM:	21	Right through				CAR	F36	N in SPRINGHILL RD	50	Proceeding in lane						
803727	P	26/06/2012	Tue	05:00		at MASTERS RD	TJN	STR	Overcast	Wet	80	1	SEM	M49	E in MASTERS RD	70	Turning right	SC	0	1	0	0	0
E49129939							RUM:	88	Out of cont on bend														S
1010425	P	14/01/2014	Tue	14:46		at MASTERS RD	TJN	CRV	Fine	Dry	80	1	SEM	M64	S in SPRINGHILL RD	40	Turning right	UC	0	0	0	0	1
E53910666							RUM:	88	Out of cont on bend														
1044501	P	08/08/2014	Fri	18:27		at MASTERS RD	TJN	STR	Fine	Dry	80	4	BDBL	M67	S in SPRINGHILL RD	30	Turning right	UC	0	0	0	0	1
E54928715							RUM:	32	Right rear				CAR	M24	S in SPRINGHILL RD	Unk	Turning right						
													PED	M36	MASTERS RD		Stand on carriageway						
													LOR		W in MASTERS RD	0	Parked loading						
1012805	P	30/01/2014	Thu	12:27	5 m	N MASTERS RD	TJN	STR	Fine	Dry	80	2	CAR	F36	S in SPRINGHILL RD	60	Proceeding in lane	UC	0	0	0	0	1
E796767390							RUM:	30	Rear end				4WD	M61	S in SPRINGHILL RD	Unk	Proceeding in lane						

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors	S F
721784	P	13/08/2010	Fri	12:00	60 m	N MASTERS RD	OTH	CRV	Fine	Dry	80	2	BDBL	M52	E in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E41213520							RUM:	30	Rear end				CAR	F26	E in SPRINGHILL RD	5	Proceeding in lane							
803906	P	18/07/2012	Wed	07:40	60 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	2	LOR	M23	N in SPRINGHILL RD	30	Veering left	NC	0	0	0	0	0	
E51088581							RUM:	35	Lane change left				CAR	M43	N in SPRINGHILL RD	70	Proceeding in lane							
778942	P	15/12/2011	Thu	09:30	70 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	3	CAR	F22	S in SPRINGHILL RD	45	Veering left	NC	0	0	0	0	0	
E48217282							RUM:	35	Lane change left				CAR	M56	S in SPRINGHILL RD	60	Proceeding in lane							
													4WD	F43	S in SPRINGHILL RD	0	Stationary							
1016561	P	27/02/2014	Thu	15:55	80 m	N MASTERS RD	DIV	STR	Raining	Wet	80	4	4WD	F54	S in SPRINGHILL RD	40	Veering right	UC	0	0	0	0	1	
E54951378							RUM:	34	Lane change right				CAR	M52	S in SPRINGHILL RD	Unk	Proceeding in lane							
													TRK	M51	S in SPRINGHILL RD	Unk	Proceeding in lane							
													WAG	M32	S in SPRINGHILL RD	0	Stationary							
1047527	P	14/07/2014	Mon	22:30	80 m	N MASTERS RD	OTH	CRV	Fine	Dry	80	1	WAG	M U	E in SPRINGHILL RD	30	Proceeding in lane	NC	0	0	0	0	0	S
E57123687							RUM:	87	Off lft/lft bnd=>obj						Other fixed object									
1042867	P	10/08/2014	Sun	04:05	80 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	2	CAR	F27	N in SPRINGHILL RD	150	Proceeding in lane	UC	0	0	0	0	3	S
E55248711							RUM:	33	Lane sideswipe				BDBL	M U	N in SPRINGHILL RD	20	Proceeding in lane							
1063697	P	24/11/2014	Mon	22:01	150 m	N MASTERS RD	DIV	CRV	Fine	Dry	40	1	M/C	M37	N in SPRINGHILL RD	50	Proceeding in lane	UC	0	0	0	0	1	S
E56183823							RUM:	81	Off left/rt bnd=>obj				S/Barrier - Concr/Jersey											
1030745	P	12/06/2014	Thu	06:30	250 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	1	CAR	M20	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	F
E55080557							RUM:	83	Off rt/rt bnd=>obj				Bridge											
1000132	P	26/09/2013	Thu	17:12	300 m	N MASTERS RD	DIV	CRV	Fine	Dry	80	3	TRK	F23	S in SPRINGHILL RD	60	Proceeding in lane	OC	0	0	0	1	0	
E101656401							RUM:	30	Rear end				CAR	F41	S in SPRINGHILL RD	0	Stationary							
													CAR	M52	S in SPRINGHILL RD	0	Stationary							
718286	P	01/07/2010	Thu	13:12	400 m	N MASTERS RD	DIV	STR	Fine	Dry	80	4	4WD	M40	S in SPRINGHILL RD	60	Proceeding in lane	OC	0	0	0	1	0	
E40822220							RUM:	30	Rear end				TRK	M58	S in SPRINGHILL RD	60	Proceeding in lane							
													CAR	F20	S in SPRINGHILL RD	70	Proceeding in lane							
													CAR	F58	S in SPRINGHILL RD	65	Proceeding in lane							
733473	P	23/10/2010	Sat	12:40	5 m	S MASTERS RD	TJN	CRV	Raining	Wet	80	1	4WD	F35	E in MASTERS RD	20	Turning right	NC	0	0	0	0	0	S
E42603666							RUM:	83	Off rt/rt bnd=>obj						Traffic island etc									
789887	P	06/03/2012	Tue	13:50	100 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR	F18	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E49107980							RUM:	62	Accident				CAR		N in SPRINGHILL RD	0	Broken down							
822219	P	07/01/2013	Mon	08:15	100 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	WAG	M19	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E50345457							RUM:	30	Rear end				WAG	M40	N in SPRINGHILL RD	60	Proceeding in lane							
1024560	P	10/05/2014	Sat	01:00	100 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR	M18	N in SPRINGHILL RD	95	Proceeding in lane	NC	0	0	0	0	0	S
E105557001							RUM:	30	Rear end				LOR	M34	N in SPRINGHILL RD	40	Proceeding in lane							

Detailed Crash Report

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1041545	P	10/09/2014	Wed	17:35	100 m	S MASTERS RD	DIV	CRV	Fine	Dry	80	2	CAR F20	S in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E55779807							RUM: 30	Rear end					CAR M65	S in SPRINGHILL RD	60	Proceeding in lane							
830606	P	11/03/2013	Mon	08:50	150 m	S MASTERS RD	DIV	STR	Fine	Dry	80	4	CAR M50	N in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	0	
E50358715							RUM: 30	Rear end					CAR M34	N in SPRINGHILL RD	5	Proceeding in lane							
													CAR F50	N in SPRINGHILL RD	5	Proceeding in lane							
													4WD M18	N in SPRINGHILL RD	10	Proceeding in lane							
814528	P	30/08/2012	Thu	12:20	200 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR M56	S in SPRINGHILL RD	70	Proceeding in lane	MC	0	0	1	0	0	
E50797685							RUM: 30	Rear end					CAR F20	S in SPRINGHILL RD	0	Stationary							
													VAN F48	S in SPRINGHILL RD	0	Stationary							
827007	P	13/02/2013	Wed	08:40	200 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR F22	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E49658960							RUM: 30	Rear end					WAG M59	N in SPRINGHILL RD	0	Stationary							
1036805	P	01/08/2014	Fri	09:05	200 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	RTKR M45	N in SPRINGHILL RD	50	Veering left	NC	0	0	0	0	0	
E55139514							RUM: 35	Lane change left					CAR F21	N in SPRINGHILL RD	60	Proceeding in lane							
835432	P	29/04/2013	Mon	07:55	300 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR F41	N in SPRINGHILL RD	70	Proceeding in lane	SC	0	2	0	0	0	
E53759783							RUM: 30	Rear end					CAR F23	N in SPRINGHILL RD	0	Stationary							
													4WD F43	N in SPRINGHILL RD	0	Stationary							
816617	P	30/08/2012	Thu	12:20	350 m	S MASTERS RD	DIV	STR	Fine	Dry	80	5	TRK M21	N in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E49223849							RUM: 30	Rear end					CAR F23	N in SPRINGHILL RD	10	Proceeding in lane							
													TRK M29	N in SPRINGHILL RD	10	Proceeding in lane							
													CAR M24	N in SPRINGHILL RD	Unk	Proceeding in lane							
													CAR M31	N in SPRINGHILL RD	Unk	Proceeding in lane							
704771	P	30/03/2010	Tue	08:25	400 m	S MASTERS RD	DIV	STR	Overcast	Wet	80	3	CAR F23	N in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0	0	
E77907402							RUM: 30	Rear end					CAR F47	N in SPRINGHILL RD	0	Stationary							
													CAR M22	N in SPRINGHILL RD	0	Stationary							
811545	P	27/08/2012	Mon	08:35	400 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR F42	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E48781633							RUM: 30	Rear end					4WD F32	N in SPRINGHILL RD	0	Stationary							
827009	P	13/02/2013	Wed	08:40	400 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	CAR M56	N in SPRINGHILL RD	60	Proceeding in lane	NC	0	0	0	0	0	
E50163125							RUM: 30	Rear end					CAR M52	N in SPRINGHILL RD	0	Stationary							
													WAG F47	N in SPRINGHILL RD	0	Stationary							
714867	P	17/05/2010	Mon	18:00	500 m	S MASTERS RD	DIV	STR	Fine	Dry	60	3	CAR M79	S in SPRINGHILL RD	60	Proceeding in lane	SC	0	1	1	0	0	
E40445330							RUM: 30	Rear end					CAR F47	S in SPRINGHILL RD	0	Stationary							
													4WD F45	S in SPRINGHILL RD	0	Stationary							
723165	P	30/08/2010	Mon	08:25	500 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	CAR M49	N in SPRINGHILL RD	40	Veering right	NC	0	0	0	0	0	
E42699641							RUM: 34	Lane change right					CAR M58	N in SPRINGHILL RD	40	Proceeding in lane							

Detailed Crash Report

Crash No.	Data Source	Date	Day of Week	Time	Distance	ID Feature	Loc Type	Alignment	Weather	Surface Condition	Speed Limit	No. of Tus	Tu Type/Obj	Age/Sex	Street Travelling	Speed Travelling	Manoeuvre	Degree of Crash-Detailed Killed	Seriously Inj.	Moderately Inj.	Minor/Other Inj.	Uncateg'd Inj.	Factors					
792145	P	22/03/2012	Thu	19:45	500 m	S MASTERS RD	DIV	STR	Fine	Dry	80	2	TRK	M43	N in SPRINGHILL RD	70	Proceeding in lane	NC	0	0	0	0						
E47973074							RUM:	30	Rear end				CAR	M24	N in SPRINGHILL RD	0	Stationary											
811402	P	20/09/2012	Thu	15:45	500 m	S MASTERS RD	DIV	STR	Fine	Dry	70	2	CAR	M59	S in SPRINGHILL RD	80	Proceeding in lane	NC	0	0	0	0	S					
E422373391							RUM:	62	Accident				WAG		S in SPRINGHILL RD	0	Broken down											
716925	P	02/07/2010	Fri	17:15	600 m	S MASTERS RD	DIV	STR	Fine	Dry	80	6	TRK	M22	N in SPRINGHILL RD	40	Proceeding in lane	SC	0	1	2	0						
E41084025							RUM:	30	Rear end				CAR	M38	N in SPRINGHILL RD	0	Stationary											
													CAR	F46	N in SPRINGHILL RD	5	Proceeding in lane											
													CAR	F53	N in SPRINGHILL RD	40	Proceeding in lane											
													CAR	M63	N in SPRINGHILL RD	0	Stationary											
													CAR	M53	N in SPRINGHILL RD	0	Stationary											
776142	P	24/11/2011	Thu	15:20	600 m	S MASTERS RD	DIV	STR	Overcast	Dry	80	2	LOR	M44	N in SPRINGHILL RD	70	Veering left	NC	0	0	0	0						
E46636673							RUM:	35	Lane change left				CAR	F U	N in SPRINGHILL RD	70	Proceeding in lane											
709978	P	04/05/2010	Tue	15:20	800 m	S MASTERS RD	DIV	STR	Fine	Dry	80	3	VAN	M27	N in SPRINGHILL RD	80	Proceeding in lane	OC	0	0	0	1						
E40510225							RUM:	30	Rear end				TRK	M28	N in SPRINGHILL RD	0	Stationary											
													CAR	M20	N in SPRINGHILL RD	0	Stationary											
714348	P	09/06/2010	Wed	17:00	5 m	W STEELWORKS ENT	DIV	STR	Fine	Dry	70	2	LOR	M36	E in SPRINGHILL RD	Unk	Proceeding in lane	MC	0	0	1	0						
E42011765							RUM:	32	Right rear				TRK	M53	E in SPRINGHILL RD	0	Wait turn right											
Wollongong																												
Springhill Rd																												
1026952	P	10/05/2014	Sat	23:00	5 m	E BRIDGE ST	TJN	STR	Fine	Wet	80	2	CAR	M17	W in SPRINGHILL RD	40	Proceeding in lane	NC	0	0	0	0						
E54617013							RUM:	30	Rear end				WAG	M18	W in SPRINGHILL RD	0	Stationary											
Report Totals: Crashes:				139	Fatal Crashes(FC): 0				Serious Injury Crashes(SC):18				Moderate Injury Crashes(MC): 14				Minor/Other Injury Crashes(OC): 16				Uncategorised Injury Crashes(UC): 7				Non-Casualty Crashes(NC): 84			
					Killed(K): 0				Seriously Injured(S): 19				Moderately Injured(M): 20				Minor/Other Injured(O): 21				Uncategorised Injured(U): 10							

Crashid dataset Springhill Road - Bridge Street to Five Islands Road

Crash self reporting, including self reported injuries began in Oct 2014. Trends from 2014 are expected to vary from previous years. More unknowns are expected in self reported data. For further information refer to Data Manual or report provider.

LOCATION
Springhill Road
Bridge Street to
Five Islands Road

Data Period
1 Jan 2010 to 31 Dec 2014

Legend

Fatal

Injury

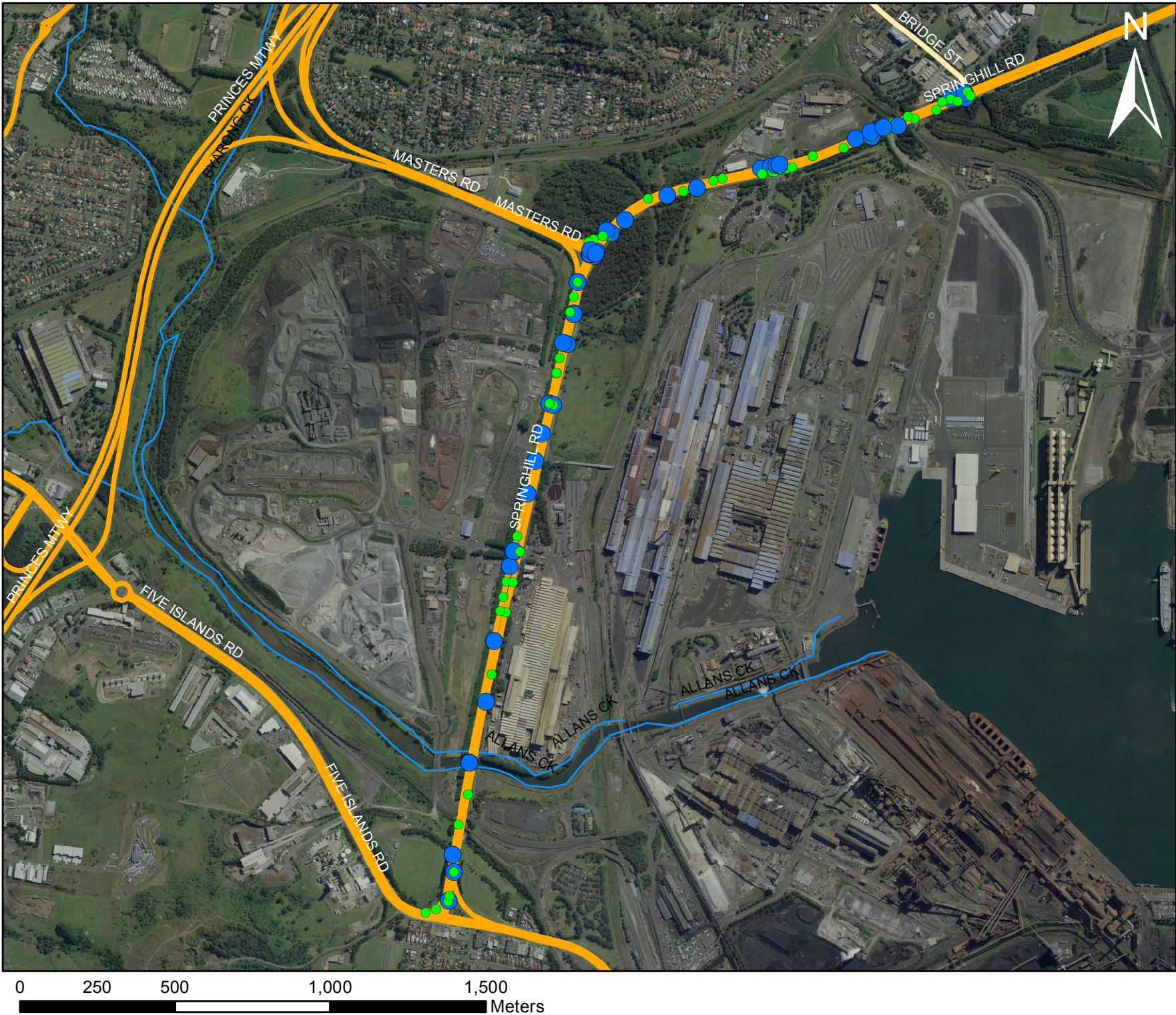
Non-casualty

State Road

Regional Road



Prepared 29/09/2015
Network Optimisation
Outer Metro, Southern



Summary Crash Report

# Crash Type			Contributing Factors			Crash Movement			CRASHES 139			CASUALTIES 70					
Car Crash	126	90.6%	Speeding	12	8.6%	Intersection, adjacent approaches	5	3.6%	Fatal	0	0.0%	Killed	0	0.0%			
Light Truck Crash	26	18.7%	Fatigue	5	3.6%	Head-on (not overtaking)	1	0.7%	Serious inj.	18	12.9%	Seriously inj.	19	27.1%			
Rigid Truck Crash	7	5.0%				Opposing vehicles; turning	10	7.2%	Moderate inj.	14	10.1%	Moderately inj.	20	28.6%			
Articulated Truck Crash	9	6.5%				U-turn	0	0.0%	Minor/Other inj.	16	11.5%	Minor/Other inj.	21	30.0%			
'Heavy Truck Crash	(15)	(10.8%)				Rear-end	73	52.5%	Uncategorised inj.	7	5.0%	Uncategorised inj.	10	14.3%			
Bus Crash	1	0.7%	Weather			Lane change	18	12.9%	Non-casualty	84	60.4%	^ Unrestrained	2	2.9%			
"Heavy Vehicle Crash	(15)	(10.8%)	Fine	108	77.7%	Parallel lanes; turning	0	0.0%	Self Reported Crash 1 .72%			^ Belt fitted but not worn, No restraint fitted to position OR No helmet worn					
Emergency Vehicle Crash	3	2.2%	Rain	22	15.8%	Vehicle leaving driveway	1	0.7%	Time Group % of Day								
Motorcycle Crash	6	4.3%	Overcast	9	6.5%	Overtaking; same direction	0	0.0%	00:01 - 02:59 2 1.4%12.5%			Crashes Casualties					
Pedal Cycle Crash	1	0.7%	Fog or mist	0	0.0%	Hit parked vehicle	2	1.4%	03:00 - 04:59 2 1.4% 8.3%			27 2014 10					
Pedestrian Crash	1	0.7%	Other	0	0.0%	Hit railway train	0	0.0%	05:00 - 05:59 2 1.4% 4.2%			22 2013 8					
' Rigid or Artic. Truck " Heavy Truck or Heavy Bus # These categories are NOT mutually exclusive			Road Surface Condition			Hit pedestrian	0	0.0%	06:00 - 06:59 4 2.9% 4.2%			34 2012 13					
			Wet	30	21.6%	Permanent obstruction on road	0	0.0%	07:00 - 07:59 9 6.5% 4.2%			26 2011 16					
			Dry	109	78.4%	Hit animal	1	0.7%	08:00 - 08:59 20 14.4% 4.2%			30 2010 23					
			Snow or ice	0	0.0%	Off road, on straight	4	2.9%	09:00 - 09:59 11 7.9% 4.2%								
* Up to 10 metres from an intersection			Natural Lighting			Off road on straight, hit object	5	3.6%	10:00 - 10:59 9 6.5% 4.2%								
			Dawn	5	3.6%	Out of control on straight	3	2.2%	11:00 - 11:59 7 5.0% 4.2%								
			Daylight	105	75.5%	Off road, on curve	1	0.7%	12:00 - 12:59 7 5.0% 4.2%								
			Dusk	6	4.3%	Off road on curve, hit object	5	3.6%	13:00 - 13:59 5 3.6% 4.2%								
			Darkness	23	16.5%	Out of control on curve	0	0.0%	14:00 - 14:59 8 5.8% 4.2%								
						Other crash type	10	7.2%	15:00 - 15:59 11 7.9% 4.2%								
									16:00 - 16:59 12 8.6% 4.2%								
									17:00 - 17:59 15 10.8% 4.2%								
									18:00 - 18:59 4 2.9% 4.2%								
									19:00 - 19:59 1 0.7% 4.2%								
									20:00 - 21:59 3 2.2% 8.3%								
									22:00 - 24:00 7 5.0% 8.3%								
									Street Lighting Off/Nil % of Dark								
									1 of 23 in Dark 4.3%								
#Holiday Periods																	
New Year	0	0.0%	Easter	0	0.0%	Queen's BD	1	0.7%	Christmas	0	0.0%	Easter SH	4	2.9%	Sept./Oct. SH	6	4.3%
Aust. Day	1	0.7%	Anzac Day	0	0.0%	Labour Day	0	0.0%	January SH	7	5.0%	June/July SH	2	1.4%	December SH	1	0.7%

Proposed Port Kembla Bulk Liquids
Terminal

APPENDIX

B

RMS TRAFFIC COUNTS –
FIVE ISLANDS ROAD

Traffic Volumes

Station ID: 07236, **Prescribed Direction:** WEST, **Road Loc Reference :** 0000295~1120~B (**Road Number~Road Link~Carriageway**), **Report Values Based On:** Axle Pair Count, **Station Name:** , **Station Description:** MR295 (Five Islands Rd), Unanderra - E of Glastonbury Ave, **RMS Region:** SOUTHERN, **Local Government Area:** WOLLONGONG, **Suburb:** UNANDERRA, **Date Range:** 19960919 to 19960927, **Days Available:** 9, **4-Bin Classifications:** ALL, **12-Bin Classifications:** ALL, **Days of Week:** ALL, **Hours of Day:** ALL, **Public Holiday:** ALL Days (including public holidays), **School Holiday:** ALL Days (including school holidays)

For information relating to this report, you can contact us via email at RISS.Info

Sample Period: 19/09/1996 - 27/09/1996

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

EAST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	60	55	56	51	72	88	119	59	104	72
01	25	47	33	52	39	64	67	39	66	47
02	32	33	32	23	29	45	48	30	47	35
03	35	28	43	36	42	41	55	37	48	40
04	65	71	87	72	80	49	35	75	42	66
05	220	224	208	233	230	134	118	223	126	195
06	1,175	1,191	1,179	1,202	1,080	599	391	1,165	495	974
07	1,593	1,696	1,620	1,630	1,490	453	234	1,606	344	1,245
08	1,812	1,850	1,817	1,754	1,737	667	275	1,794	471	1,416
09	992	1,055	1,015	1,111	1,112	703	547	1,057	625	934
10	887	836	920	876	957	807	652	895	730	848
11	830	829	921	850	965	810	675	879	743	840
12	761	822	778	844	937	676	609	828	643	775
13	877	809	833	879	862	661	547	852	604	781
14	948	961	953	994	1,053	758	688	982	723	908
15	982	1,031	1,014	1,103	1,038	558	501	1,034	530	890
16	787	876	873	913	845	438	419	859	429	736
17	714	729	782	805	638	454	424	734	439	649
18	529	593	580	651	609	486	367	592	427	545
19	328	385	375	450	415	353	283	391	318	370
20	263	243	281	295	280	241	264	272	253	267
21	207	235	238	247	198	147	191	225	169	209
22	334	325	341	337	363	274	264	340	269	320
23	132	123	144	152	181	180	103	146	142	145
TOTAL	14,588	15,047	15,123	15,557	15,250	9,686	7,876	15,113	8,781	13,304

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

WEST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	29	28	47	46	45	62	81	39	72	48
01	11	31	22	28	54	52	54	29	53	36
02	13	21	61	42	32	30	28	34	29	32
03	54	57	48	44	39	27	24	48	26	42
04	37	45	48	54	50	47	31	47	39	45
05	130	170	166	178	177	95	45	164	70	137
06	384	446	455	464	444	205	161	439	183	366
07	556	638	599	597	582	255	164	594	210	484
08	654	688	760	740	688	275	170	706	223	568
09	612	622	598	564	583	390	272	596	331	520
10	621	626	605	606	649	505	365	621	435	568
11	603	590	647	633	686	487	408	632	448	579
12	573	577	611	568	749	521	427	616	474	575
13	574	636	597	658	699	468	390	633	429	575
14	767	807	851	830	898	552	540	831	546	749
15	1,276	1,435	1,296	1,323	1,353	538	522	1,337	530	1,106
16	993	980	987	994	969	420	505	985	463	835
17	1,015	991	1,020	966	952	320	398	989	359	809
18	499	495	556	534	519	318	308	521	313	461
19	324	301	301	347	301	226	227	315	227	290
20	254	244	274	281	219	158	160	254	159	227
21	183	211	235	243	151	121	140	205	131	183
22	204	290	275	261	226	195	184	251	190	234
23	117	157	124	155	181	160	94	147	127	141
TOTAL	10,483	11,086	11,183	11,152	11,244	6,427	5,698	11,030	6,063	9,610

Traffic Volumes

Station ID: 07236, **Prescribed Direction:** WEST, **Road Loc Reference :** 0000295~1120~B (**Road Number~Road Link~Carriageway**), **Report Values Based On:** Axle Pair Count, **Station Name:** , **Station Description:** MR295 (Five Islands Rd), Unanderra - E of Glastonbury Ave, **RMS Region:** SOUTHERN, **Local Government Area:** WOLLONGONG, **Suburb:** UNANDERRA, **Date Range:** 19970827 to 19970903, **Days Available:** 8, **4-Bin Classifications:** ALL, **12-Bin Classifications:** ALL, **Days of Week:** ALL, **Hours of Day:** ALL, **Public Holiday:** ALL Days (including public holidays), **School Holiday:** ALL Days (including school holidays)

For information relating to this report, you can contact us via email at RISS.Info

Sample Period: 27/08/1997 to 03/09/1997

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

EAST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	8	24	9	18	3	27	1	12	14	13
01	8	12	10	10	0	5	0	8	3	6
02	1	10	10	13	1	8	0	7	4	6
03	5	8	7	9	5	1	0	7	1	5
04	15	18	14	14	5	9	0	13	5	11
05	35	55	42	23	19	16	0	35	8	27
06	287	595	625	126	111	163	11	349	87	274
07	636	863	1,398	585	350	212	8	766	110	579
08	1,528	1,078	1,847	897	934	432	12	1,257	222	961
09	856	376	1,117	1,054	783	555	31	837	293	682
10	370	426	932	1,025	856	366	75	722	221	579
11	217	534	513	676	815	262	72	551	167	441
12	224	642	424	478	461	219	53	446	136	357
13	262	649	402	479	442	121	75	447	98	347
14	391	641	348	449	385	101	65	443	83	340
15	286	639	335	359	389	49	47	402	48	301
16	225	636	167	281	201	45	29	302	37	226
17	141	365	115	147	146	33	20	183	27	138
18	56	164	48	89	252	24	21	122	23	93
19	39	40	40	43	101	1	8	53	5	39
20	16	31	16	23	74	2	9	32	6	24
21	9	18	6	10	58	3	5	20	4	16
22	23	34	18	9	35	5	9	24	7	19
23	9	10	3	2	22	1	14	9	8	9
TOTAL	5,647	7,868	8,446	6,819	6,448	2,660	565	7,046	1,613	5,493

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

WEST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	18	32	28	55	45	95	65	36	80	48
01	18	44	35	25	26	50	52	30	51	36
02	23	23	32	40	38	33	40	31	37	33
03	38	18	26	40	40	31	25	32	28	31
04	63	68	65	73	78	52	29	69	41	61
05	171	165	135	158	148	108	51	155	80	134
06	437	422	458	436	407	241	175	432	208	368
07	608	559	593	577	604	296	172	588	234	487
08	659	670	761	697	695	325	182	696	254	570
09	556	604	589	576	581	432	279	581	356	517
10	627	535	635	595	587	479	325	596	402	540
11	554	562	665	655	646	573	436	616	505	584
12	574	578	575	594	616	617	415	587	516	567
13	624	573	604	659	652	597	407	622	502	588
14	793	742	836	834	828	599	508	807	554	734
15	1,336	1,272	1,405	1,402	1,007	518	474	1,284	496	1,059
16	949	926	979	937	833	481	463	925	472	795
17	952	946	942	972	865	403	407	935	405	784
18	462	519	496	578	504	298	292	512	295	450
19	251	281	272	315	289	179	187	282	183	253
20	172	205	219	277	207	183	144	216	164	201
21	136	137	220	227	187	191	130	181	161	175
22	181	226	231	249	212	212	145	220	179	208
23	124	140	128	154	177	161	108	145	135	142
TOTAL	10,326	10,247	10,929	11,125	10,272	7,154	5,511	10,580	6,333	9,366

Traffic Volumes

Station ID: 07236, **Prescribed Direction:** WEST, **Road Loc Reference :** 0000295~1120~B (**Road Number~Road Link~Carriageway**), **Report Values Based On:** Axle Pair Count, **Station Name:** , **Station Description:** MR295 (Five Islands Rd), Unanderra - E of Glastonbury Ave, **RMS Region:** SOUTHERN, **Local Government Area:** WOLLONGONG, **Suburb:** UNANDERRA, **Date Range:** 19981201 to 19981209, **Days Available:** 9, **4-Bin Classifications:** ALL, **12-Bin Classifications:** ALL, **Days of Week:** ALL, **Hours of Day:** ALL, **Public Holiday:** ALL Days (including public holidays), **School Holiday:** ALL Days (including school holidays)

For information relating to this report, you can contact us via email at RISS.Info

Sample Period: 01/12/1998 to 09/12/1998

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

EAST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	160	137	147	154	162	219	167	152	193	164
01	59	92	71	89	104	124	129	83	127	95
02	30	38	37	30	47	82	79	36	81	49
03	46	42	32	48	45	66	53	43	60	47
04	40	52	42	36	65	47	48	47	48	47
05	83	91	89	112	99	62	66	95	64	86
06	262	257	273	255	239	181	107	257	144	225
07	1,103	1,199	1,175	1,107	1,150	594	354	1,147	474	955
08	1,558	1,584	1,603	1,541	1,540	491	200	1,565	346	1,217
09	1,833	1,807	1,710	1,729	1,746	749	319	1,765	534	1,413
10	1,119	1,152	1,142	1,133	1,097	890	561	1,129	726	1,013
11	956	990	906	914	917	870	725	937	798	897
12	878	955	878	932	915	926	709	912	818	885
13	797	823	810	865	992	782	640	857	711	816
14	768	824	876	894	954	693	670	863	682	811
15	950	962	1,021	985	982	789	635	980	712	903
16	966	995	1,034	1,035	1,031	608	553	1,012	581	889
17	879	857	920	1,005	938	460	457	920	459	788
18	695	723	834	934	785	567	482	794	525	717
19	550	636	736	734	818	588	491	695	540	650
20	353	400	484	555	621	403	318	483	361	448
21	237	283	310	336	323	271	310	298	291	296
22	209	238	273	279	283	247	265	256	256	256
23	266	321	348	327	322	256	294	317	275	305
TOTAL	14,797	15,456	15,749	16,029	16,175	10,965	8,632	15,641	9,799	13,972

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

WEST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	107	150	147	164	154	214	167	144	191	158
01	46	52	46	65	77	105	107	57	106	71
02	18	57	40	37	52	74	62	41	68	49
03	19	16	27	34	54	47	27	30	37	32
04	36	55	54	56	66	51	35	53	43	50
05	41	93	91	99	110	72	32	87	52	77
06	162	172	198	165	192	108	56	178	82	150
07	427	450	445	437	459	270	166	444	218	379
08	539	562	585	572	554	286	155	562	221	465
09	669	658	652	628	691	326	208	660	267	547
10	619	561	580	535	625	441	315	584	378	525
11	585	608	585	624	567	516	330	594	423	545
12	625	598	676	675	654	556	414	646	485	600
13	636	574	597	606	625	554	390	608	472	569
14	639	642	612	628	689	526	370	642	448	587
15	773	823	821	777	933	590	495	825	543	745
16	1,293	1,239	1,301	1,322	1,291	532	488	1,289	510	1,067
17	923	895	944	973	997	506	527	946	517	824
18	901	962	1,019	960	943	382	414	957	398	797
19	527	532	525	552	534	363	347	534	355	483
20	268	343	338	350	334	231	273	327	252	305
21	206	252	265	399	241	230	269	273	250	266
22	190	251	225	334	236	186	170	247	178	227
23	265	272	301	270	263	200	231	274	216	257
TOTAL	10,514	10,815	11,072	11,262	11,341	7,366	6,048	11,001	6,707	9,774

Traffic Volumes

Station ID: 07236, **Prescribed Direction:** WEST, **Road Loc Reference :** 0000295~1120~B (**Road Number~Road Link~Carriageway**), **Report Values Based On:** Axle Pair Count, **Station Name :** , **Station Description:** MR295 (Five Islands Rd), Unanderra - E of Glastonbury Ave, **RMS Region:** SOUTHERN, **Local Government Area:** WOLLONGONG, **Suburb:** UNANDERRA, **Date Range:** 20001213 to 20001224, **Days Available:** 12, **4-Bin Classifications:** ALL, **12-Bin Classifications:** ALL, **Days of Week:** ALL, **Hours of Day:** ALL, **Public Holiday:** ALL Days (including public holidays), **School Holiday:** ALL Days (including school holidays)

For information relating to this report, you can contact us via email at RISS.Info

Sample Period: 13/12/2000 to 24/12/2000

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

EAST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	134	130	170	156	168	214	192	152	203	166
01	83	47	89	104	106	153	166	86	159	107
02	46	44	73	65	84	121	110	62	115	77
03	49	40	44	45	42	68	70	44	69	51
04	41	71	46	59	58	67	58	55	62	57
05	112	103	98	100	113	107	66	105	87	100
06	281	326	361	304	302	216	121	315	168	273
07	1,168	1,111	1,139	1,097	944	491	354	1,092	422	900
08	1,460	1,526	1,539	1,466	1,252	437	214	1,449	325	1,128
09	1,802	1,826	1,830	1,842	1,721	737	400	1,804	568	1,451
10	1,158	1,253	1,170	1,175	1,144	857	667	1,180	762	1,060
11	991	1,065	1,127	1,004	1,077	885	740	1,053	812	984
12	1,002	989	1,102	1,005	1,052	899	837	1,030	868	984
13	925	934	900	949	982	751	688	938	720	875
14	934	938	989	941	910	720	592	942	656	860
15	1,047	1,085	1,020	1,081	946	750	655	1,036	703	940
16	1,134	981	1,069	1,097	1,002	590	528	1,056	559	914
17	859	900	850	946	824	517	433	876	475	761
18	711	743	859	895	725	571	414	787	493	703
19	541	645	676	778	740	601	496	676	549	639
20	353	445	489	555	544	483	341	477	412	458
21	278	329	326	408	401	338	281	348	309	337
22	217	286	299	337	339	312	289	296	301	297
23	307	324	333	329	369	330	355	332	342	335
TOTAL	15,633	16,141	16,594	16,730	15,839	11,209	9,065	16,187	10,137	14,459

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

WEST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	132	127	155	158	180	196	190	150	193	162
01	61	51	89	62	72	111	122	67	116	81
02	60	32	32	43	51	77	77	44	77	53
03	28	35	43	32	35	57	62	34	59	41
04	56	76	41	61	52	68	43	57	55	57
05	96	93	72	100	72	74	36	87	55	78
06	183	182	183	180	155	113	71	177	92	152
07	472	478	475	463	419	266	177	461	222	393
08	558	596	580	520	534	256	165	558	210	458
09	667	655	622	638	606	279	204	638	241	524
10	625	643	601	581	593	371	310	609	340	532
11	639	649	674	709	625	495	399	659	447	598
12	640	659	707	718	710	530	441	687	486	629
13	658	655	636	686	785	546	446	684	496	630
14	649	686	682	725	784	527	431	705	479	640
15	896	906	850	852	878	529	551	876	540	780
16	1,237	1,222	1,246	1,191	910	524	547	1,161	535	982
17	964	977	987	944	768	459	543	928	501	806
18	863	893	914	879	704	423	434	850	429	730
19	521	562	571	547	517	389	391	543	390	500
20	257	360	365	376	364	269	284	344	276	325
21	180	266	285	339	308	249	255	275	252	269
22	223	241	267	345	286	240	280	272	260	269
23	208	267	239	292	235	246	234	248	240	246
TOTAL	10,873	11,311	11,314	11,435	10,636	7,285	6,690	11,114	6,987	9,935

Traffic Volumes

Station ID: 07236, **Prescribed Direction:** WEST, **Road Loc Reference :** 0000295~1120~B (**Road Number~Road Link~Carriageway**), **Report Values Based On:** Axle Pair Count, **Station Name:** , **Station Description:** MR295 (Five Islands Rd), Unanderra - E of Glastonbury Ave, **RMS Region:** SOUTHERN, **Local Government Area:** WOLLONGONG, **Suburb:** UNANDERRA, **Date Range:** 20020620 to 20060703, **Days Available:** 23, **4-Bin Classifications:** ALL, **12-Bin Classifications:** ALL, **Days of Week:** ALL, **Hours of Day:** ALL, **Public Holiday:** ALL Days (including public holidays), **School Holiday:** ALL Days (including school holidays)

For information relating to this report, you can contact us via email at RISS.Info

Sample Period: 20/06/2002 to 03/07/2002

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

EAST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	62	68	60	88	76	106	116	71	111	82
01	43	50	46	51	55	78	84	49	81	58
02	35	45	54	53	44	47	58	46	53	48
03	50	67	53	44	53	57	55	53	56	54
04	108	108	104	95	101	68	62	103	65	92
05	343	344	343	345	306	203	129	336	166	288
06	1,116	1,167	1,179	1,167		502	301	1,143	401	931
07	1,415	1,451	1,515	1,489	1,342	453	213	1,442	333	1,125
08	1,815	1,800	1,857	1,838	1,723	702	272	1,807	487	1,430
09	1,157	1,105	1,167	1,178	1,116	776	538	1,145	657	1,005
10	877	896	931	991	967	930	652	932	791	892
11	898	892	864	904	942	894	726	900	810	874
12	831	812	809	816	896	816	661	833	739	806
13	818	841	858	858	899	778	607	855	693	808
14	912	960	953	935	955	768	619	943	693	872
15	944	994	956	1,029	1,015	599	527	988	563	866
16	818	852	871	887	860	526	445	857	485	751
17	667	752	800	910	748	534	446	775	490	694
18	547	587	625	778	643	546	393	636	470	589
19	295	330	356	439	415	336	236	367	286	344
20	205	270	254	279	281	228	220	258	224	248
21	184	203	224	233	225	215	159	214	187	206
22	204	220	218	252	257	218	188	230	203	222
23	99	118	142	123	155	171	135	127	153	135
TOTAL	14,443	14,931	15,235	15,780	15,163	10,551	7,842	15,110	9,197	13,421

07236: Average Traffic Volume - Axle Pair Count - Hours and Day of Week by Direction

WEST

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Weekdays	Weekends	All Days
00	41	57	52	67	63	92	76	56	84	64
01	19	31	25	24	37	48	55	27	51	34
02	26	27	31	26	31	40	39	28	40	31
03	48	59	56	63	51	39	36	55	37	50
04	62	63	67	71	72	50	27	67	38	59
05	179	172	198	194	186	126	61	186	93	159
06	408	413	445	435	407	223	160	422	192	356
07	518	519	563	550	497	248	144	530	196	434
08	626	626	699	666	594	329	162	642	246	529
09	526	533	594	552	524	380	232	546	306	477
10	556	544	571	566	574	471	332	562	401	516
11	602	567	589	617	646	537	393	604	465	564
12	599	628	584	585	655	518	423	610	471	570
13	626	658	674	633	675	495	447	653	471	601
14	742	795	807	773	797	502	486	783	494	700
15	1,127	1,187	1,280	1,147	1,129	501	491	1,174	496	980
16	918	972	984	948	916	525	480	948	503	820
17	894	969	941	1,025	846	432	387	935	410	785
18	502	555	515	666	502	315	344	548	330	486
19	246	284	287	354	281	236	191	290	214	268
20	166	211	183	258	196	163	143	203	153	189
21	139	156	172	225	192	152	116	177	134	165
22	155	162	180	177	184	148	112	172	130	160
23	100	112	103	105	146	133	96	113	115	114
TOTAL	9,825	10,299	10,598	10,726	10,202	6,701	5,434	10,330	6,068	9,112

Station ID	Direction	Location	Sample Period	Count Type	Average vehicles per day	Hour 0	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Hour 7	Hour 8	Hour 9	Hour 10	Hour 11
7236	EAST	FIVE ISLANDS ROAD, UNANDERRA	02/08/2005 to 10/08/2005	AXLE PAIR COUNT	14,429	79	52	46	51	96	324	1,056	1,243	1,532	1,062	958	948
7236	WEST	FIVE ISLANDS ROAD, UNANDERRA	02/08/2005 to 10/08/2005	AXLE PAIR COUNT	10,208	65	32	34	55	67	194	409	507	647	548	598	651
7236	EAST	FIVE ISLANDS ROAD, UNANDERRA	12/06/2005 to 05/07/2007	AXLE PAIR COUNT	14,283	73	60	57	67	115	380	1,030	1,230	1,538	1,034	963	942
7236	WEST	FIVE ISLANDS ROAD, UNANDERRA	12/06/2005 to 05/07/2007	AXLE PAIR COUNT	10,089	63	39	44	59	81	214	446	509	633	549	578	631

Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23
871	858	915	959	833	776	615	350	257	198	204	134
642	655	771	1,118	915	879	544	269	188	158	154	97
893	867	902	934	794	768	567	322	244	191	178	121
641	658	782	1,063	919	858	471	246	183	163	147	102