## Appendix K

# Traffic Impact Assessment

# TRAFFIC IMPACT ASSESSMENT

## Chalumbin Wind Farm

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|---|---|
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## Document Revision History

| Version | Version Date | Revision History |
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| **Draft** | **11/06/2021** | **Issued to client** |
| **1.0** | **16/07/2021** | **Issued to client** |
| **1.1** | **16/08/2021** | **Issued to client – Fixed 'Table 6' cross-referencing issue on pages 20, 27 and 31.** |
| **1.2** | **08/12/2021** | **Minor updates to Project details which were incorporated into the Project's description and calculations, which did not change the overall findings of the report.** |
| | | |

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## STATEMENT OF LIMITATION

Data and conclusions of this report are the findings and opinions of icubed consulting and are not an expressed or implied representation, warranty or guarantee. This report has been prepared for Attexo Group. icubed consulting does not accept liability for any third party's use or reliance on this report.

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# 1 Introduction

icubed consulting was engaged by Attexo Group to undertake a Traffic Impact Assessment (TIA) of Chalumbin Wind Farm (the Project) which is to be included with an application for a development approval under the provisions of the Queensland State Code 23 Wind Farm Development. The wind farm is located some 20 km south of Ravenshoe, QLD and (at time of writing) will consist of up to 94 Wind Turbine Generators (WTGs). The wind farm is to be developed by Epuron Projects Pty Ltd.

This report details the results of this assessment, including an evaluation of:

- Existing conditions;
- The proposed access arrangements;
- The proposed development traffic requirements; and
- The impact of the proposed development on the surrounding road network.

This report is preliminary at this stage, and should be revised once the Project reaches the detailed design stage of works and a Contractor has been engaged to re-assess the discussed outcomes.

Once final Project details have been confirmed it is recommended that this report be revised.

## 1.1 Limits of Report

The above tasks have been carried out based on information supplied by other members of the Project team, a desktop review and information from relevant authorities. These are detailed in the report.

While icubed has taken care in the preparation of this report, it accepts neither liability nor responsibility whatsoever in respect of:

- Any use of this report by any third party; and
- Any third party whose interests may be affected by any decision made regarding the contents of this report.

## 1.2 Legislative Requirements and Policies

This report has been completed in accordance with, but not limited to, the following:

- Transport Infrastructure Act (1994);
- Guide to Traffic Impact Assessment (Department of Transport and Main Roads, December 2018);
- State Code 1: Development in a state-controlled road environment; and
- State Code 23: Wind farm development.

# 2 Existing Conditions

## 2.1 Site Location

The subject site is located some 20 km south of Ravenshoe and 70 km south-west of Innisfail. As shown in Figure 1, The wind farm Project is planned to be constructed over the following lots: Lot 31SP288862 and 1CWL3298.

The proposed preliminary site layout is attached in Appendix A.

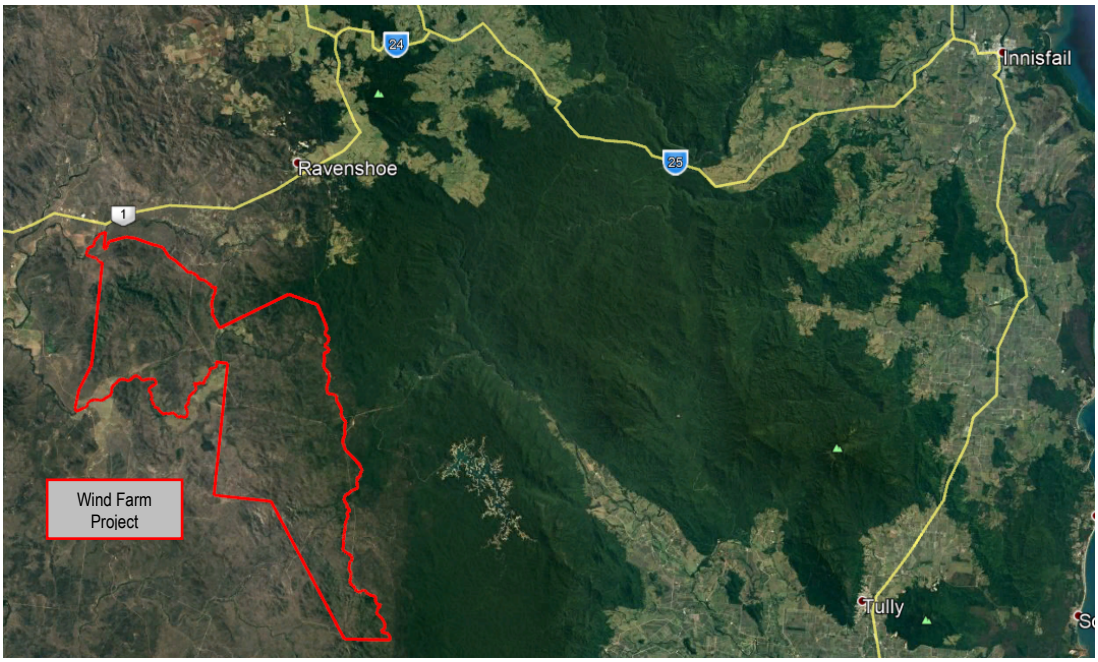



Figure 1 – Current site Project boundary

## 2.2 Surrounding Local Road Network Details

From the identified transport routes detailed in Section 3.2, vehicles will turn off the state-controlled Kennedy Highway and travel along Tully Falls Road for 550 m before turning onto Wooroora Road, both of which are local roads controlled by Tablelands Regional Council. Wooroora Road will provide access to the Project's site boundary which is approximately 14.5 km from Kennedy Highway. Figure 2 below shows these local roads between Kennedy Highway and the Project site boundary.

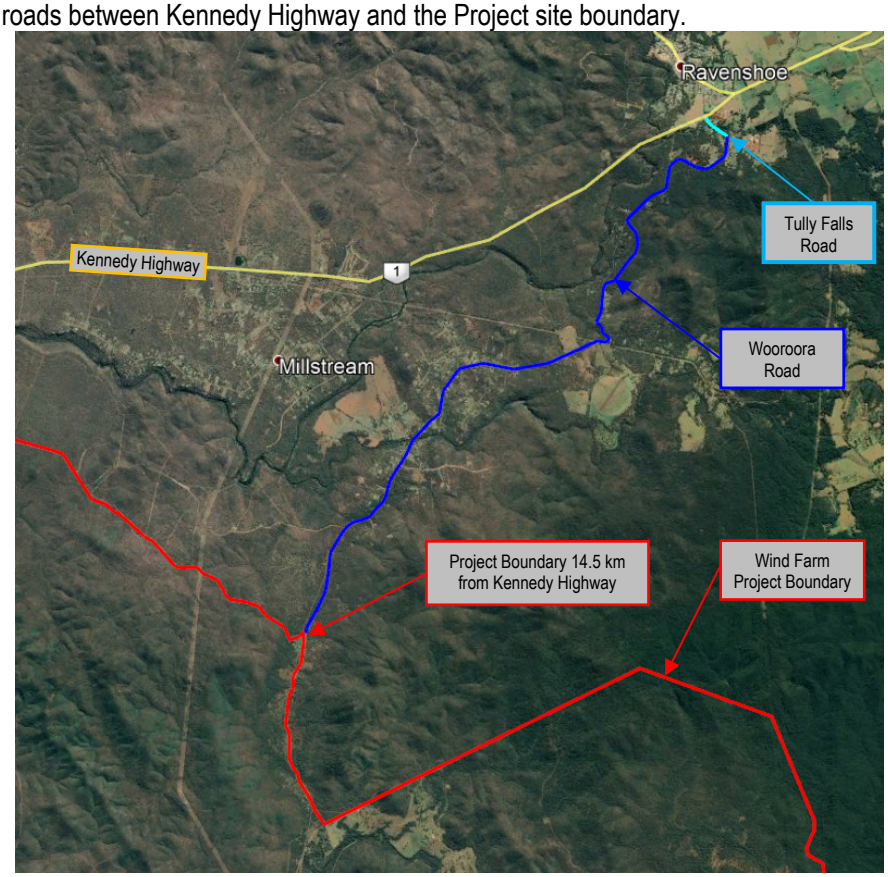



Figure 2 – Local roads to Project site


Figure 3 – Kennedy Highway / Tully Falls Road / Moffat Street intersection (-17.615974, 145.487140; looking west)


Figure 4 – Tully Falls Road / Wooroora Road intersection (-17.619171, 145.490781; looking east)

# 3 Proposed Development Details

## 3.1 Description of Proposed Development

The proposed development will comprise of a wind farm which has been assumed, for the purpose of this assessment, to be built in a single stage, with the Project construction period to be over approximately 18 – 24 months. At time of writing, the wind farm will comprise of up to 94 Wind Turbine Generators (WTG's) spread across the subject site. The WTG tower base will have a diameter of up to 5.5 m and the WTG blade will be up to 85 m long, but this is yet to be finalised.

The wind farm layout is expected to comprise approximately 142 km of internal access tracks, 94 WTG hardstands and various construction benches including construction compounds, 2 batch plants (north and south), a switchyard, Operations and Maintenance (O & M) compound, 2 internal substations, a BESS compound and 8 met masts.

The proposed preliminary site layout is attached in Appendix A.

## 3.2 Proposed Transport Routes

The construction phase traffic impact created by the wind farm will be in the form of:

- Transportation of equipment;
- Transportation of materials; and
- Transportation of workers.

This report refers to the Project Transport Route Study (TRS) by icubed consulting, *'20-315 – Chalumbin WF Transport Route Study'* version 1.1 dated 8/12/2021, which outlines the transportation route of Over-Size Over-Mass (OSOM) vehicles from the Port of Cairns to the Project site. Transport Route 1 (TR1) is adopted and assessed in this TIA report, but the other routes in the TRS (routes TR2 – 4) are not included in this assessment. TR1 is shown below in Figure 5.

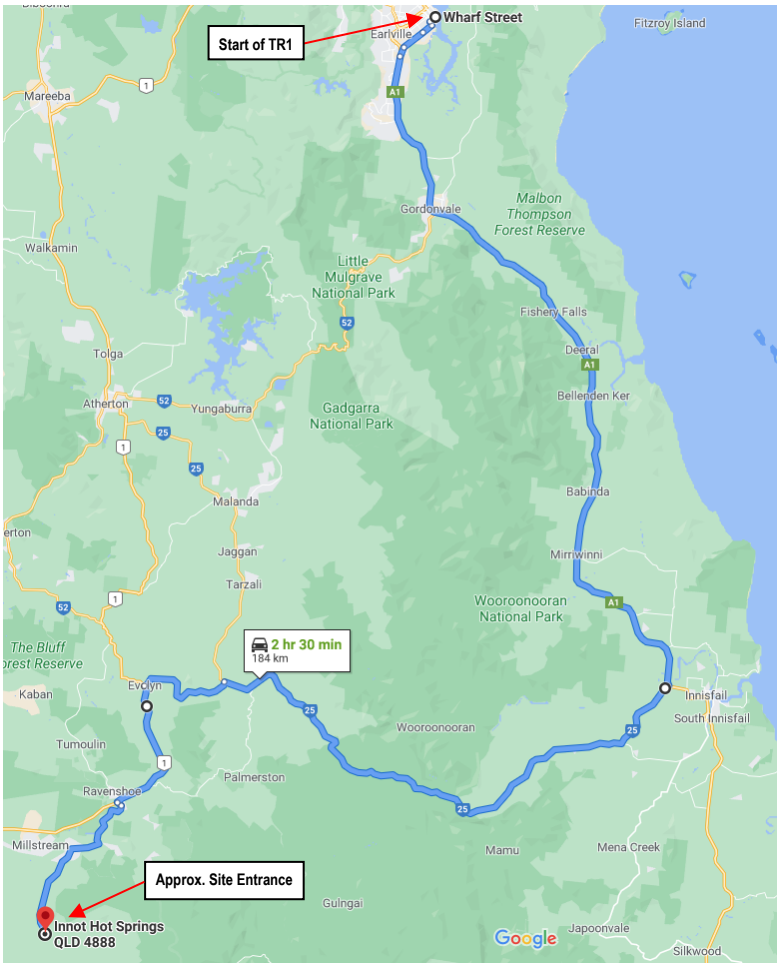


Figure 5 – Proposed Transport Route 1

In addition to TR1, five other transport routes (TR5 – 9) have been adopted for this TIA, which will be assumed to accommodate the other Project necessities such as road and concrete materials, electrical components, pipes, water and personnel. The routes will be analysed assuming the vehicles will follow the same path to and from the site. Figure 6 below shows a visual representation of TR5 – 9 while Table 1 lists the constituting roads within each route.


Figure 6 – Proposed Transport Routes 5 – 9

Table 1 – Constituting Roads within Transport Routes

| Transport Route Description | Constituting Roads |
|---|---|
| From Port of Cairns wharf directly to the Project site<br>**(Transport Route 1)** | Wharf Street<br>Kenny Street<br>Draper Street<br>Comport Street<br>Ray Jones Drive<br>Bruce Highway<br>Palmerston Highway<br>East Evelyn Road<br>Kennedy Highway<br>Tully Falls Road<br>Wooroora Road (Project site) |
| From Ravenshoe to the Project site<br>**(Transport Route 5)** | Grigg Street<br>Moore Street<br>Moffat Street<br>Tully Falls Road<br>Wooroora Road (Project site) |
| From Innisfail to the Project site<br>**(Transport Route 6)** | Palmerston Highway<br>East Evelyn Road<br>Kennedy Highway<br>Tully Falls Road<br>Wooroora Road (Project site) |

| | |
|---|---|
| From Malanda to the Project site **(Transport Route 7)** | Malanda-Atherton Road<br>Millaa Millaa-Malanda Road<br>East Evelyn Road<br>Kennedy Highway<br>Tully Falls Road<br>Wooroora Road (Project site) |
| From Atherton to the Project site **(Transport Route 8)** | Main Street<br>Robert Street<br>Kennedy Highway<br>Tully Falls Road<br>Wooroora Road (Project site) |
| From Herberton/Moomin to the Project site **(Transport Route 9)** | Atherton-Herberton Road (Broadway)<br>Longlands Gap-Herberton Road<br>Kennedy Highway<br>Tully Falls Road<br>Wooroora Road (Project site) |

Note: Road names sometimes appear differently between Google Earth and Google Maps

## 3.3 Proposed Access Arrangements

The Project site will be accessed by turning off the state-controlled Kennedy Highway onto the local council roads Tully Falls Road and then Wooroora Road, as shown in Figure 2 above. Tully Falls Road (from Kennedy Highway to its intersection with Wooroora Road) is sealed while Wooroora Road is only sealed for the initial 9.9 km towards the Project site. The remaining route into site is unsealed. It is anticipated that both of these local roads will need some form of upgrade. Minor shoulder gravel-widening is anticipated at the Tully Falls Road / Wooroora Road intersection and other tight bends along the route, while general road widening is also feasible along the route along with a re-sheeting of pavement for the un-sealed sections of Wooroora Road. Alternatively full reconstruction of the roadway back within the road reserve may be required after further assessment during the detailed design phase.

A construction phase Traffic Management Plan (TMP) is proposed to implement appropriate signage and controls to create an appropriate level of awareness of increased vehicle movements in the area.

## 3.4 Parking and Internal Layout

There will be sufficient areas set aside for parking at the construction compounds during the construction stages of this Project to accommodate the anticipated number of construction and employee vehicles. Approximately 250 – 350 people, not including delivery drivers, are expected during construction of the wind farm, with 10% assumed to carpool.

The existing local road Wooroora Road will be used within the site and will be upgraded where necessary. New, internal tracks will also be constructed off Wooroora Road which will all be assessed and designed to safely and efficiently allow for the movement of construction vehicles to the construction compounds.

The Operations Compounds will be provided with car parking spaces for staff likely to be employed at the wind farm during its operation phase. It is currently expected that staff numbers during the operational phase of the wind farm will be approximately 10 to 15 staff, with few visitors or deliveries.

# 4 Existing Condition Assessment

With transport routes identified, an assessment of the existing conditions of the routes can be completed.

## 4.1 Road Network

Transport routes and accesses to the proposed wind farm have been identified as being from areas surrounding Ravenshoe, Innisfail, Cairns, Malanda, Atherton and Herberton/Moomin. The site will be serviced from these locations by a range of state controlled and local council roads as detailed in Table 2. The table only assesses the section of road included in the transport routes in this report. Some roads may be partially owned by different authorities.

Table 2 – Road Networks

| Road Classification | Road Name |
|---|---|
| **State controlled roads** | Kenny Street *<br>Draper Street<br>Comport Street<br>Ray Jones Drive<br>Bruce Highway<br>Palmerston Highway<br>East Evelyn Road<br>Kennedy Highway<br>Grigg Street<br>Moore Street<br>Malanda-Atherton Road<br>Millaa Millaa-Malanda Road<br>Main Street<br>Robert Street<br>Atherton-Herberton Road (Broadway)<br>Longlands Gap-Herberton Road |
| **Local Council Roads (Cairns Regional Council)** | Wharf Street<br>Kenny Street * |
| **Local Council Roads (Tablelands Regional Council)** | Tully Falls Road<br>Wooroora Road<br>Moffat Street |

* Indicates roads which are shared by more than one authority

## 4.2 Traffic Volumes

"Actual" traffic volumes for the state-controlled networks and local council roads shown in Table 2 have been determined using Annual Average Daily Traffic (AADT) data provided by the Department of Transport and Main Roads and relevant council authorities if available. The AADT data records for state roads is readily available on the Queensland Government website through the link below, while the relevant council data acquired for this assessment can be found in Appendix C.

https://www.data.qld.gov.au/dataset/traffic-census-for-the-queensland-state-declared-road-network/resource/dc82ec39-4513-437c-8d07-ecb08474a065?truncate=30&inner_span=True

A summary of critical information required by the Traffic Impact Assessment is displayed in Table 3 below.

Assumptions for the data analysis are as follows:

- Both directions of travel have been analysed, as traffic would need to arrive at the specific location and leave in the same direction of travel.
- For the state-controlled networks, annual growth rates were provided based on the last 5 years of data, if it was available. For the purpose of this assessment, the “Actual” AADT was calculated for a project commencement year of 2022.
- Where the annual five-year growth rate was not available for a road section, the rate was taken to be zero.
- Where the annual five-year growth rate indicated negative growth, the rate was taken to be zero.
- Where the percentage of heavy vehicles was not available for a road section, the percentage of heavy vehicles from the adjacent road section was adopted and averaged.

Table 3 – Summary of "Actual" Traffic Impact Data

| Transport Route | Road Section ID | Site ID | Road section name | Combined bi-directional traffic data | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Historic AADT | Count year | % Heavy Vehicles | Growth rate (5 year data) | AADT ("Actual") |
| **1** | | | Wharf Street | 3902 | 2017 | 8.16% | 0.00% [2] | 3902 |
| **1** | | | Kenny Street | Data not available | | | | |
| **1** | 810 | 111643 | Draper Street (Portsmith) | 21481 | 2019 | 5.68% | 1.90% | 22726 |
| **1** | 10P | 111566 | Comport Street | 19897 | 2019 | 5.12% | 1.27% | 20668 |
| **1** | 10P | 110030 | Ray Jones Drive | 33251 | 2019 | 6.15% | 4.36% | 37793 |
| **1** | 10P | 110009 | Bruce Highway (Innisfail - Cairns) | 53554 | 2019 | 6.44% | 1.92% | 56691 |
| **1** | 10P | 111635 | Bruce Highway (Innisfail - Cairns) | 39918 | 2019 | 15.63% | 0.87% | 40969 |
| **1** | 10P | 110025 | Bruce Highway (Innisfail - Cairns) | 35032 | 2019 | 6.15% | 0.30% | 35347 |
| **1** | 10P | 111632 | Bruce Highway (Innisfail - Cairns) | 21213 | 2019 | 8.25% | 2.09% | 22573 |
| **1** | 10P | 110032 | Bruce Highway (Innisfail - Cairns) | 18783 | 2019 | 8.12% | 1.95% | 19904 |
| **1** | 10P | 111648 | Bruce Highway (Innisfail - Cairns) | 11798 | 2019 | 9.42% | 3.51% | 13083 |
| **1** | 10P | 111647 | Bruce Highway (Innisfail - Cairns) | 7442 | 2019 | 10.48% | 1.68% | 7824 |
| **1** | 10P | 110001 | Bruce Highway (Innisfail - Cairns) | 6001 | 2019 | 13.53% | 1.48% | 6272 |
| **1** | 10P | 110050 | Bruce Highway (Innisfail - Cairns) | 6212 | 2019 | 11.96% | 0.11% [3] | 6232 |
| **1** | 10P | 110040 | Bruce Highway (Innisfail - Cairns) | 6970 | 2019 | 11.94% | 0.00% [1] | 6970 |
| **1, 6** | 21A | 111678 | Palmerston Highway (Innisfail - Ravenshoe) | 3763 | 2019 | 9.05% | 0.00% [1] | 3763 |
| **1, 6** | 21A | 111525 | Palmerston Highway (Innisfail - Ravenshoe) | 1954 | 2019 | 16.52% | 0.00% [1] | 1954 |
| **1, 6** | 21A | 110218 | Palmerston Highway (Innisfail - Ravenshoe) | 2202 | 2019 | 22.19% | 1.27% | 2287 |
| **1, 6** | 21A | 110004 | Palmerston Highway (Innisfail - Ravenshoe) | 1375 | 2019 | 23.66% | 2.35% | 1474 |
| **1, 6** | 641 | 111646 | Millaa Millaa - Milanda Road | 2122 | 2019 | 20.76% | 3.18% | 2331 |
| **1, 6, 7** | 6404 | 110077 | East Evelyn Road | 404 | 2019 | 27.16% | 7.93% | 508 |
| **1, 6, 7, 8, 9** | 32B | 111616 | Kennedy Highway (Mareeba - Ravenshoe) | 697 | 2019 | 11.64% | 3.50% | 773 |
| **1, 6, 7, 8, 9** | 32C | 111496 | Kennedy Highway (Ravenshoe - Mt Garnet) | 1775 | 2019 | 16.28% | 2.56% | 1915 |
| **1, 5, 6, 7, 8, 9** | CV48T8KV MC56-L5 | | Tully Falls Road | 1564 | 2018 | 7.00% | 0.00% [2] | 1564 |

| Transport Route | Road Section ID | Site ID | Road section name | Combined bi-directional traffic data | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Historic AADT | Count year | % Heavy Vehicles | Growth rate (5 year data) | AADT ("Actual") |
| **1, 5, 6, 7, 8, 9** | Q2205BNJ MC56-L4 | | Wooroora Road (Approx CH 400 m) | 667 | 2012 | 7.20% | 0.00% [2] | 667 |
| **1, 5, 6, 7, 8, 9** | CS916NHM MC56-L5 | | Wooroora Road (Approx CH 10 km) | 117 | 2012 | 10.30% | 0.00% [2] | 117 |
| **5** | 6605 | 111582 | Grigg Street & Moore Street | 3343 | 2019 | 7.97% | 0.00% [1] | 3343 |
| **5** | N2404F1A MC56-L5 | | Moffat Street | 2640 | 2013 | 8.70% | 0.00% [2] | 2640 |
| **5** | Transport Route 5 continues into CV48T8KV MC56-L5 (Tully Falls Road) | | | | | | | |
| **6** | 10P | 111571 | Bruce Highway (Innisfail - Cairns) | 12378 | 2019 | 9.28% | 0.00% [1] | 12378 |
| **6** | 10P | 111559 | Bruce Highway (Innisfail - Cairns) | 9389 | 2019 | 9.85% | 0.00% [1] | 9389 |
| **6** | Transport Route 6 continues onto 111678 (Palmerston Highway) | | | | | | | |
| **7** | 645 | 111581 | James Street | 4164 | 2019 | 12.63% | 1.82% | 4396 |
| **7** | 641 | 111509 | Patrick Street & Millaa Millaa Road | 2815 | 2019 | 16.31% | 0.00% [1] | 2815 |
| **7** | Transport Route 7 continues onto 110077 (East Evelyn Road) | | | | | | | |
| **8** | 32B | 110044 | Main Street | 13823 | 2019 | 5.77% | 3.14% | 15168 |
| **8** | 32B | 111585 | Kennedy Highway / Robert Street | 7962 | 2019 | 4.58% | 1.65% | 8362 |
| **8, 9** | 32B | 110003 | Kennedy Highway | 1649 | 2019 | 12.25% | 0.48% | 1673 |
| **8, 9** | Transport Route 8 and 9 continues into 111616 (Kennedy Highway) | | | | | | | |
| **9** | 663 | 111512 | Atherton-Herberton Rd / Longlands Gap-Herberton Road | 2090 | 2019 | 6.58% | 0.09% | 2096 |
| **9** | 665 | 111555 | Longlands Gap-Herberton Road | 2090 | 2019 | 6.58% | 0.10% | 2096 |
| **9** | 665 | 111530 | Longlands Gap-Herberton Road | 485 | 2019 | 12.19% | 0.00% [1] | 485 |
| **9** | Transport Route 9 continues into 110003 (Kennedy Highway) | | | | | | | |

[1] The published growth rates for the road section was negative. A zero-growth rate was adopted.
[2] The annual five-year growth rate was not available for this section. A zero-growth rate was adopted.
[3] Only 3 years of data available.

## 4.3 Traffic ESA Data

"Actual" traffic equivalent standard axle (ESA) data for the state-controlled networks and local council roads shown in Table 4 have been determined using AADT data provided by the Department of Transport and Main Roads website and by contacting the relevant regional councils for available data. The AADT data records provided by local councils can be found in Appendix C with a summary of critical information required by the Pavement Impact Assessment in Table 4.

Data along Kenny Street was not available for the transport route and as such could not be included in this report.

Assumptions for the data analysis is as follows:

- Both directions of travel have been analysed, as traffic would need to arrive at the specific location and leave in the same direction of travel.
- For the state-controlled networks, annual growth rates were provided based on one, five- and ten-year data. For the purpose of this traffic volume assessment, the five-year growth rate has been adopted.
- Where the annual five-year growth rate was not available for a road section, the rate was taken to be zero.
- Where the annual five-year growth rate indicated negative growth, the rate was taken to be zero.
- Where the percentage of heavy vehicles was not available for a road section, the percentage of heavy vehicles from the adjacent road section was adopted and averaged.

Table 4 – Summary of "Actual" Pavement Impact Data

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | | | Assumed ESA Values | | "Actual" Traffic Data | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | % Heavy Vehicles | % Light Vehicles | Annual growth Rate | HV ESA | LV ESA | AADT | Background traffic ESA |
| **1** | | | Wharf Street | 3902 | 2017 | 8.16% | 91.84% | 0.00% | 3.2 | 1.18 | 3902 | 5248 |
| **1** | | | Kenny Street | Data not available | | | | | | | | |
| **1** | 810 | 111643 | Draper Street (Portsmith) | 21481 | 2019 | 5.68% | 94.32% | 1.90% | 3.2 | 1.18 | 22726 | 29424 |
| **1** | 10P | 111566 | Comport Street | 19897 | 2019 | 5.12% | 94.88% | 1.27% | 3.2 | 1.18 | 20668 | 26525 |
| **1** | 10P | 110030 | Ray Jones Drive | 33251 | 2019 | 6.15% | 93.85% | 4.36% | 3.2 | 1.18 | 37793 | 49291 |
| **1** | 10P | 110009 | Bruce Highway (Innisfail - Cairns) | 53554 | 2019 | 6.44% | 93.56% | 1.92% | 3.2 | 1.18 | 56691 | 74271 |
| **1** | 10P | 111635 | Bruce Highway (Innisfail - Cairns) | 39918 | 2019 | 15.63% | 84.37% | 0.87% | 3.2 | 1.18 | 40969 | 61279 |
| **1** | 10P | 110025 | Bruce Highway (Innisfail - Cairns) | 35032 | 2019 | 6.15% | 93.85% | 0.30% | 3.2 | 1.18 | 35347 | 46101 |
| **1** | 10P | 111632 | Bruce Highway (Innisfail - Cairns) | 21213 | 2019 | 8.25% | 91.75% | 2.09% | 3.2 | 1.18 | 22573 | 30397 |
| **1** | 10P | 110032 | Bruce Highway (Innisfail - Cairns) | 18783 | 2019 | 8.12% | 91.88% | 1.95% | 3.2 | 1.18 | 19904 | 26751 |
| **1** | 10P | 111648 | Bruce Highway (Innisfail - Cairns) | 11798 | 2019 | 9.42% | 90.58% | 3.51% | 3.2 | 1.18 | 13083 | 17928 |
| **1** | 10P | 111647 | Bruce Highway (Innisfail - Cairns) | 7442 | 2019 | 10.48% | 89.52% | 1.68% | 3.2 | 1.18 | 7824 | 10889 |
| **1** | 10P | 110001 | Bruce Highway (Innisfail - Cairns) | 6001 | 2019 | 13.53% | 86.47% | 1.48% | 3.2 | 1.18 | 6272 | 9115 |
| **1** | 10P | 110050 | Bruce Highway (Innisfail - Cairns) | 6212 | 2019 | 11.96% | 88.04% | 0.11% | 3.2 | 1.18 | 6232 | 8859 |
| **1** | 10P | 110040 | Bruce Highway (Innisfail - Cairns) | 6970 | 2019 | 11.94% | 88.06% | 0.00% | 3.2 | 1.18 | 6970 | 9906 |
| **1, 6** | 21A | 111678 | Palmerston Highway (Innisfail - Ravenshoe) | 3763 | 2019 | 9.05% | 90.95% | 0.00% | 3.2 | 1.18 | 3763 | 5128 |
| **1, 6** | 21A | 111525 | Palmerston Highway (Innisfail - Ravenshoe) | 1954 | 2019 | 16.52% | 83.48% | 0.00% | 3.2 | 1.18 | 1954 | 2958 |
| **1, 6** | 21A | 110218 | Palmerston Highway (Innisfail - Ravenshoe) | 2202 | 2019 | 22.19% | 77.81% | 1.27% | 3.2 | 1.18 | 2287 | 3724 |
| **1, 6** | 21A | 110004 | Palmerston Highway (Innisfail - Ravenshoe) | 1375 | 2019 | 23.66% | 76.34% | 2.35% | 3.2 | 1.18 | 1474 | 2444 |
| **1, 6** | 641 | 111646 | Millaa Millaa - Milanda Road | 2122 | 2019 | 20.76% | 79.24% | 3.18% | 3.2 | 1.18 | 2331 | 3729 |
| **1, 6, 7** | 6404 | 110077 | East Evelyn Road | 404 | 2019 | 27.16% | 72.84% | 7.93% | 3.2 | 1.18 | 508 | 878 |
| **1, 6, 7, 8, 9** | 32B | 111616 | Kennedy Highway (Mareeba - Ravenshoe) | 697 | 2019 | 11.64% | 88.36% | 3.50% | 3.2 | 1.18 | 773 | 1094 |

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | | | Assumed ESA Values | | "Actual" Traffic Data | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | % Heavy Vehicles | % Light Vehicles | Annual growth Rate | HV ESA | LV ESA | AADT | Background traffic ESA |
| **1, 6, 7, 8, 9** | 32C | 111496 | Kennedy Highway (Ravenshoe - Mt Garnet) | 1775 | 2019 | 16.28% | 83.72% | 2.56% | 3.2 | 1.18 | 1915 | 2889 |
| **1, 5, 6, 7, 8, 9** | CV48T8KV MC56-L5 | | Tully Falls Road | 1564 | 2018 | 7.00% | 93.00% | 0.00% | 3.2 | 1.18 | 1564 | 2067 |
| **1, 5, 6, 7, 8, 9** | Q2205BNJ MC56-L4 | | Wooroora Road (Approx CH 400 m) | 667 | 2012 | 7.20% | 92.80% | 0.00% | 3.2 | 1.18 | 667 | 884 |
| **1, 5, 6, 7, 8, 9** | CS916NHM MC56-L5 | | Wooroora Road (Approx CH 10 km) | 117 | 2012 | 10.30% | 89.70% | 0.00% | 3.2 | 1.18 | 117 | 162 |
| **5** | 6605 | 111582 | Grigg Street & Moore Street | 3343 | 2019 | 7.97% | 92.03% | 0.00% | 3.2 | 1.18 | 3343 | 4483 |
| **5** | N2404F1A MC56-L5 | | Moffat Street | 2640 | 2013 | 8.70% | 91.30% | 0.00% | 3.2 | 1.18 | 2640 | 3579 |
| **5** | Transport Route 5 continues into CV48T8KV MC56-L5 (Tully Falls Road) | | | | | | | | | | | |
| **6** | 10P | 111571 | Bruce Highway (Innisfail - Cairns) | 12378 | 2019 | 9.28% | 90.72% | 0.00% | 3.2 | 1.18 | 12378 | 16926 |
| **6** | 10P | 111559 | Bruce Highway (Innisfail - Cairns) | 9389 | 2019 | 9.85% | 90.15% | 0.00% | 3.2 | 1.18 | 9389 | 12947 |
| **6** | Transport Route 6 continues onto 111678 (Palmerston Highway) | | | | | | | | | | | |
| **7** | 645 | 111581 | James Street | 4164 | 2019 | 12.63% | 87.37% | 1.82% | 3.2 | 1.18 | 4396 | 6309 |
| **7** | 641 | 111509 | Patrick Street & Millaa Millaa Road | 2815 | 2019 | 16.31% | 83.69% | 0.00% | 3.2 | 1.18 | 2815 | 4249 |
| **7** | Transport Route 7 continues onto 110077 (East Evelyn Road) | | | | | | | | | | | |
| **8** | 32B | 110044 | Main Street | 13823 | 2019 | 5.77% | 94.23% | 3.14% | 3.2 | 1.18 | 15168 | 19666 |
| **8** | 32B | 111585 | Kennedy Highway / Robert Street | 7962 | 2019 | 4.58% | 95.42% | 1.65% | 3.2 | 1.18 | 8362 | 10641 |
| **8, 9** | 32B | 110003 | Kennedy Highway | 1649 | 2019 | 12.25% | 87.75% | 0.48% | 3.2 | 1.18 | 1673 | 2388 |
| **8, 9** | Transport Route 8 and 9 continues into 111616 (Kennedy Highway) | | | | | | | | | | | |
| **9** | 663 | 111512 | Atherton-Herberton Rd / Longlands Gap-Herberton Road | 2090 | 2019 | 6.58% | 93.42% | 0.09% | 3.2 | 1.18 | 2096 | 2752 |
| **9** | 665 | 111555 | Longlands Gap-Herberton Road | 2090 | 2019 | 6.58% | 93.42% | 0.10% | 3.2 | 1.18 | 2096 | 2752 |
| **9** | 665 | 111530 | Longlands Gap-Herberton Road | 485 | 2019 | 12.19% | 87.81% | 0.00% | 3.2 | 1.18 | 485 | 692 |
| **9** | Transport Route 9 continues into 110003 (Kennedy Highway) | | | | | | | | | | | |

# 5 Development Traffic

## 5.1 Design Vehicles

The requirements for access to the wind farm are expected to vary between the construction and operational phases of the Project.

During the construction phase, vehicles arriving on site will be a combination of workers in light vehicles, and delivery and construction in heavy vehicles. It is expected that the design vehicle during the construction phase will be a B-Double Vehicle and wind turbine generator blade trailer oversized vehicle.

During the operational phase of the Project, there are only expected to be occasional visits for inspection, security, maintenance and system monitoring by staff in light vehicles. The largest vehicles expected to travel to/from the site during the operational phase are mobile large cranes in the event that a wind turbine generator, blade or gearbox requires maintenance.

## 5.2 Trip Generation – Construction Phase

The trip generation characteristics of the proposed development are anticipated to be significantly different during the construction and operational phases of the Project. The majority of the traffic impact from the development will occur during the construction phase when a significant number of workers and trucks access the site.

The number of trips expected to be generated during the construction phase of the wind farm was estimated using preliminary information (including a WTG layout), details provided by Epuron Projects Pty Ltd (the Project developer) and on icubed consulting's experience with wind farm projects:

- Stage 1: Material Deliveries and Construction; and
- Stage 2: Operations.

In calculating the peak hour trip generation during construction of the Wind Farm, a number of assumptions were made. These include:

- 10% of employees are expected to carpool;
- Average labour force has been considered;
- The workers travelling in light vehicles are expected to arrive during the morning peak hour, and depart during the evening peak hour;
- Heavy equipment is expected to be delivered to site at the beginning of construction phases and removed at the end, and will not be transported to/from the site every day;
- Gravel and concrete truck arrivals/departures are expected to be evenly distributed throughout the day;
- Transportation of wind turbine components are assumed to be largely off peak;
- Traffic generation above is for trips on Council roads adjacent to the site;
- Traffic generation has been based on an assumed schedule of quantities, including foundation design assumptions, potential access track upgrades, formwork, pipework, expected electrical cable lengths and bedding. The assumed schedule of quantities has been based on preliminary information provided to icubed consulting and through our experience on wind farm projects.

The estimated number of trips generated during construction is summarised in Table 5, with more detailed calculations provided in Appendix B.

Table 5 - Peak hour trip generation during construction and operations

| Phase | Morning Peak (veh/hr) | Afternoon Peak (veh/hr) |
|---|---|---|
| **Phase 1 – Construction** | 330 | 292 |
| **Phase 2 – Operations** | 16 | 16 |

Based on the estimates of worker numbers, it is expected that between 82% and 92% of the inbound vehicles (at peak construction) at peak hour and outbound vehicles entering peak hour will be light vehicles during the construction period. The remainder of the vehicles are expected to be heavy vehicles (trucks), including:

- Flatbed trucks;
- Water trucks;
- Truck and Dog quarry trucks;
- 19m AV trucks;
- B-double trucks;
- Over-dimensional Vehicles (Oversize / Over-mass vehicles) for delivery of substation transformer and electricity transmission poles
- Over-dimensional Vehicles (Oversize / Over-mass vehicles) for delivery of wind turbine components (Blades, Towers, Nacelle, Hub)
- Large mobile cranes (approx. 800 Tonne)
- Small mobile cranes (approx. 25 Tonne Franna)
- Other equipment delivery trucks and/or heavy equipment mobilising to the site at the beginning and end of each construction phase;

The trip generation within this report has been based on construction staff travelling to the site by car, as detailed in Appendix B.

## 5.3 Trip Generation – Operational Phase

The completed wind farm is expected to employ up to 15 staff on site to conduct routine maintenance, with 10% of these assumed to carpool to site. There are very few visitors and deliveries required to the operational site and as such the impact of traffic is considered to be negligible with no more than 28 maintenance staff trips per day being generated.

In calculating the peak hour trip generation during the operational phase of the wind farm, a number of assumptions were made. These include:

- The workers travelling in light vehicles are expected to arrive during the morning peak hour, and depart during the evening peak hour;
- Average labour force has been considered;
- Large vehicles such as a mobile crane may visit site on rare occasions, but is not considered a regular traffic movement; and
- 10% of employees are expected to carpool.

# 6 Impact Assessment and Mitigation

## 6.1 Construction Trip Generation and Distribution

The trip generation data detailed in Section 5 of this report covers the Construction and Operational Phases, as these phases will produce the majority of impacts on traffic and pavements. The Decommissioning Phase will require a new Traffic Management Plan to be prepared, as the Wind Farm Operator may choose to either replace the wind turbines with newer models or decommission the wind turbines and other above-ground infrastructure. Both of these decommissioning options will have significant differences in traffic loadings, and as such cannot be foreseen.

Table 6 shows the trip generation data that has been summarised from Section 5. Additional details in this table shows a distribution of the percentage of the construction activity relative to the transport method and transport route (refer Table 1).

Table 6 - Indicative Traffic Distribution for Construction Activities

| Construction Activity | Percentage of total quantity transported | Transported Via | Transport Route |
|---|---|---|---|
| **Workers** | 30% | Ravenshoe | 5 |
| | 40% | Innisfail | 6 |
| | 5% | Herberton/Moomin | 9 |
| | 15% | Atherton | 8 |
| | 10% | Malanda | 7 |
| **Water Truck** | 100% | Ravenshoe | 5 |
| **Cement tanker** | 100% | Atherton | 8 |
| **Flyash Deliveries** | 100% | Atherton | 8 |
| **Silica Fume Deliveries** | 100% | Atherton | 8 |
| **20mm concrete aggregate** | 100% | Ravenshoe | 5 |
| **10mm concrete aggregate** | 100% | Ravenshoe | 5 |
| **Gravel** | 100% | Ravenshoe | 5 |
| **14mm sealing aggregate** | 100% | Ravenshoe | 5 |
| **7mm sealing aggregate** | 100% | Ravenshoe | 5 |
| **Riversand Deliveries** | 100% | Ravenshoe | 5 |
| **Crusherdust Deliveries** | 100% | Ravenshoe | 5 |
| **RCP deliveries** | 70% | Innisfail | 6 |
| | 30% | Atherton | 8 |
| **Formwork** | 100% | Cairns | 1 |
| **Steel Embedments and Met Masts** | 100% | Cairns | 1 |
| **Steel Reinforcement** | 100% | Cairns | 1 |
| **Electrical Cable** | 100% | Cairns | 1 |
| **Electrical Overhead Lines (OHL)** | 100% | Cairns | 1 |
| **Electrical OHL Equipment** | 100% | Cairns | 1 |
| **Power Poles** | 100% | Cairns | 1 |
| **Electrical - Transformers** | 100% | Cairns | 1 |
| **Electrical - Switch Room** | 100% | Cairns | 1 |
| **WTGs - Blade deliveries** | 100% | Cairns | 1 |
| **WTGs - Nacelle deliveries** | 100% | Cairns | 1 |
| **WTGs - Hub deliveries** | 100% | Cairns | 1 |
| **WTGs - Tower sections** | 100% | Cairns | 1 |
| **WTGs - Tower sections** | 100% | Cairns | 1 |
| **Cranes** | 100% | Cairns | 1 |
| **Portable Buildings** | 100% | Cairns | 1 |

## 6.2 Construction Forecast Project Traffic Volumes

The indicative traffic distribution results shown in Table 6 can be used to assess the forecasted traffic volumes.

The forecasted traffic volumes for each transport route (refer Table 1) have been compiled in Table 7 – Table 12 separately to show the trip variation against the transport route and construction activity.

Table 7 - TR1 Cairns - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| **Workers** | 0 | 0 | 0 | 0 |
| **Water Truck** | 0 | 0 | 0 | 0 |
| **Cement tanker** | 0 | 0 | 0 | 0 |
| **Flyash Deliveries** | 0 | 0 | 0 | 0 |
| **Silica Fume Deliveries** | 0 | 0 | 0 | 0 |
| **20mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **10mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **Gravel** | 0 | 0 | 0 | 0 |
| **14mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **7mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **Riversand Deliveries** | 0 | 0 | 0 | 0 |
| **Crusherdust Deliveries** | 0 | 0 | 0 | 0 |
| **RCP deliveries** | 0 | 0 | 0 | 0 |
| **Formwork** | 0 | 1 | 0 | 1 |
| **Steel Embedments and Met Masts** | 0 | 2 | 0 | 1 |
| **Steel reinforcement** | 0 | 1 | 0 | 1 |
| **Electrical Cable** | 0 | 2 | 0 | 2 |
| **Electrical Overhead Lines (OHL)** | 0 | 1 | 0 | 1 |
| **Electrical OHL Equipment** | 0 | 1 | 0 | 1 |
| **Electrical BESS Batteries *** | 0 | 1 * | 0 | 1 * |
| **Power Poles** | 0 | 0 | 1 | 1 |
| **Electrical - Transformers** | 0 | 0 | 1 | 1 |
| **Electrical - Switch Room** | 0 | 0 | 1 | 1 |
| **WTGs - Blade deliveries** | 0 | 0 | 2 | 2 |
| **WTGs - Nacelle deliveries** | 0 | 0 | 1 | 1 |
| **WTGs - Hub deliveries** | 0 | 0 | 1 | 1 |
| **WTGs - Tower (6 sections)** | 0 | 0 | 2 | 2 |
| **Cranes** | 0 | 0 | 2 | 2 |
| **Portable Buildings** | 0 | 0 | 1 | 1 |
| **Total Trips** | **0** | **9** | **12** | **21** |

* BESS Batteries will be delivered at the end of the project and will not impact peak traffic events, as such it has been included in the pavement impact assessment but not the traffic impact assessment values

Table 8 – TR5 Ravenshoe - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| **Workers** | 180 | 0 | 0 | 180 |
| **Water Truck** | 50 | 0 | 0 | 50 |
| **Cement tanker** | 0 | 0 | 0 | 0 |
| **Flyash Deliveries** | 0 | 0 | 0 | 0 |
| **Silica Fume Deliveries** | 0 | 0 | 0 | 0 |
| **20mm concrete aggregate** | 0 | 11 | 0 | 11 |
| **10mm concrete aggregate** | 0 | 8 | 0 | 8 |
| **Gravel** | 0 | 18 | 0 | 1 |
| **14mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **7mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **Riversand Deliveries** | 0 | 10 | 0 | 10 |
| **Crusherdust Deliveries** | 0 | 7 | 0 | 7 |
| **RCP deliveries** | 0 | 0 | 0 | 0 |
| **Formwork** | 0 | 0 | 0 | 0 |
| **Steel Embedments and Met Masts** | 0 | 0 | 0 | 0 |
| **Steel reinforcement** | 0 | 0 | 0 | 0 |
| **Electrical Cable** | 0 | 0 | 0 | 0 |
| **Electrical Overhead Lines (OHL)** | 0 | 0 | 0 | 0 |
| **Electrical OHL Equipment** | 0 | 0 | 0 | 0 |
| **Power Poles** | 0 | 0 | 0 | 0 |
| **Electrical - Transformers** | 0 | 0 | 0 | 0 |
| **Electrical - Switch Room** | 0 | 0 | 0 | 0 |
| **WTGs - Blade deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Nacelle deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Hub deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Tower (6 sections)** | 0 | 0 | 0 | 0 |
| **Cranes** | 0 | 0 | 0 | 0 |
| **Portable Buildings** | 0 | 0 | 0 | 0 |
| **Total Trips** | **230** | **54** | **0** | **284** |

Table 9 – TR6 Innisfail - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| Workers | 240 | 0 | 0 | 240 |
| Water Truck | 0 | 0 | 0 | 0 |
| Cement tanker | 0 | 0 | 0 | 0 |
| Flyash Deliveries | 0 | 0 | 0 | 0 |
| Silica Fume Deliveries | 0 | 0 | 0 | 0 |
| 20mm concrete aggregate | 0 | 0 | 0 | 0 |
| 10mm concrete aggregate | 0 | 0 | 0 | 0 |
| Gravel | 0 | 0 | 0 | 0 |
| 14mm sealing aggregate | 0 | 0 | 0 | 0 |
| 7mm sealing aggregate | 0 | 0 | 0 | 0 |
| Riversand Deliveries | 0 | 0 | 0 | 0 |
| Crusherdust Deliveries | 0 | 0 | 0 | 0 |
| RCP deliveries | 0 | 1 | 0 | 1 |
| Formwork | 0 | 0 | 0 | 0 |
| Steel Embedments and Met Masts | 0 | 0 | 0 | 0 |
| Steel reinforcement | 0 | 0 | 0 | 0 |
| Electrical Cable | 0 | 0 | 0 | 0 |
| Electrical Overhead Lines (OHL) | 0 | 0 | 0 | 0 |
| Electrical OHL Equipment | 0 | 0 | 0 | 0 |
| Power Poles | 0 | 0 | 0 | 0 |
| Electrical - Transformers | 0 | 0 | 0 | 0 |
| Electrical - Switch Room | 0 | 0 | 0 | 0 |
| WTGs - Blade deliveries | 0 | 0 | 0 | 0 |
| WTGs - Nacelle deliveries | 0 | 0 | 0 | 0 |
| WTGs - Hub deliveries | 0 | 0 | 0 | 0 |
| WTGs - Tower (6 sections) | 0 | 0 | 0 | 0 |
| Cranes | 0 | 0 | 0 | 0 |
| Portable Buildings | 0 | 0 | 0 | 0 |
| **Total Trips** | **240** | **1** | **0** | **241** |

Table 10 – TR7 Malanda - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| **Workers** | 60 | 0 | 0 | 60 |
| **Water Truck** | 0 | 0 | 0 | 0 |
| **Cement tanker** | 0 | 0 | 0 | 0 |
| **Flyash Deliveries** | 0 | 0 | 0 | 0 |
| **Silica Fume Deliveries** | 0 | 0 | 0 | 0 |
| **20mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **10mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **Gravel** | 0 | 0 | 0 | 0 |
| **14mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **7mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **Riversand Deliveries** | 0 | 0 | 0 | 0 |
| **Crusherdust Deliveries** | 0 | 0 | 0 | 0 |
| **RCP deliveries** | 0 | 0 | 0 | 0 |
| **Formwork** | 0 | 0 | 0 | 0 |
| **Steel Embedments and Met Masts** | 0 | 0 | 0 | 0 |
| **Steel reinforcement** | 0 | 0 | 0 | 0 |
| **Electrical Cable** | 0 | 0 | 0 | 0 |
| **Electrical Overhead Lines (OHL)** | 0 | 0 | 0 | 0 |
| **Electrical OHL Equipment** | 0 | 0 | 0 | 0 |
| **Power Poles** | 0 | 0 | 0 | 0 |
| **Electrical - Transformers** | 0 | 0 | 0 | 0 |
| **Electrical - Switch Room** | 0 | 0 | 0 | 0 |
| **WTGs - Blade deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Nacelle deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Hub deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Tower (6 sections)** | 0 | 0 | 0 | 0 |
| **Cranes** | 0 | 0 | 0 | 0 |
| **Portable Buildings** | 0 | 0 | 0 | 0 |
| **Total Trips** | **60** | **0** | **0** | **60** |

Table 11 – TR8 Atherton - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| **Workers** | 90 | 0 | 0 | 90 |
| **Water Truck** | 0 | 0 | 0 | 0 |
| **Cement tanker** | 0 | 2 | 0 | 2 |
| **Flyash Deliveries** | 0 | 1 | 0 | 1 |
| **Silica Fume Deliveries** | 0 | 1 | 0 | 1 |
| **20mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **10mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **Gravel** | 0 | 0 | 0 | 0 |
| **14mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **7mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **Riversand Deliveries** | 0 | 0 | 0 | 0 |
| **Crusherdust Deliveries** | 0 | 0 | 0 | 0 |
| **RCP deliveries** | 0 | 1 | 0 | 1 |
| **Formwork** | 0 | 0 | 0 | 0 |
| **Steel Embedments and Met Masts** | 0 | 0 | 0 | 0 |
| **Steel reinforcement** | 0 | 0 | 0 | 0 |
| **Electrical Cable** | 0 | 0 | 0 | 0 |
| **Electrical Overhead Lines (OHL)** | 0 | 0 | 0 | 0 |
| **Electrical OHL Equipment** | 0 | 0 | 0 | 0 |
| **Power Poles** | 0 | 0 | 0 | 0 |
| **Electrical - Transformers** | 0 | 0 | 0 | 0 |
| **Electrical - Switch Room** | 0 | 0 | 0 | 0 |
| **WTGs - Blade deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Nacelle deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Hub deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Tower (6 sections)** | 0 | 0 | 0 | 0 |
| **Cranes** | 0 | 0 | 0 | 0 |
| **Portable Buildings** | 0 | 0 | 0 | 0 |
| **Total Trips** | **90** | **5** | **0** | **95** |

Table 12 – TR9 Herberton/Moomin - Daily Project Related Traffic Volumes

| Construction Activity | Total daily two-way vehicle trips | | | |
|---|---|---|---|---|
| | Light vehicle trips | Heavy vehicle trips | Over dimensional vehicle trips | Total trips |
| **Workers** | 60 | 0 | 0 | 60 |
| **Water Truck** | 0 | 0 | 0 | 0 |
| **Cement tanker** | 0 | 0 | 0 | 0 |
| **Flyash Deliveries** | 0 | 0 | 0 | 0 |
| **Silica Fume Deliveries** | 0 | 0 | 0 | 0 |
| **20mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **10mm concrete aggregate** | 0 | 0 | 0 | 0 |
| **Gravel** | 0 | 0 | 0 | 0 |
| **14mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **7mm sealing aggregate** | 0 | 0 | 0 | 0 |
| **Riversand Deliveries** | 0 | 0 | 0 | 0 |
| **Crusherdust Deliveries** | 0 | 0 | 0 | 0 |
| **RCP deliveries** | 0 | 0 | 0 | 0 |
| **Formwork** | 0 | 0 | 0 | 0 |
| **Steel Embedments and Met Masts** | 0 | 0 | 0 | 0 |
| **Steel reinforcement** | 0 | 0 | 0 | 0 |
| **Electrical Cable** | 0 | 0 | 0 | 0 |
| **Electrical Overhead Lines (OHL)** | 0 | 0 | 0 | 0 |
| **Electrical OHL Equipment** | 0 | 0 | 0 | 0 |
| **Power Poles** | 0 | 0 | 0 | 0 |
| **Electrical - Transformers** | 0 | 0 | 0 | 0 |
| **Electrical - Switch Room** | 0 | 0 | 0 | 0 |
| **WTGs - Blade deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Nacelle deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Hub deliveries** | 0 | 0 | 0 | 0 |
| **WTGs - Tower (6 sections)** | 0 | 0 | 0 | 0 |
| **Cranes** | 0 | 0 | 0 | 0 |
| **Portable Buildings** | 0 | 0 | 0 | 0 |
| **Total Trips** | **60** | **0** | **0** | **60** |

## 6.3 Construction Phase Road Impact Assessment

The following traffic assessment has been completed by considering the following targets:

- 5% traffic impact – Comparison of existing traffic with development related traffic; and
- 5% pavement impact – Comparison of existing Equivalent Standard Axle (ESA) with development related ESA.

These impact assessments will look into the potential impacts of the wind farm on surrounding transport networks during the construction phase, as this phase will have the largest impact on the networks.

### *6.3.1 Traffic Impact Assessment and Mitigation*

The traffic impact assessment has taken the following vehicle path assumption as the basis for the assessment:

- Traffic relating to the Project construction will travel to site along the identified traffic routes, and return via the same path.

With the above assumption governing the assessment, the following processes were followed:

- "Actual" AADT data was created with annual growth rates incorporated to give a more indicative likely value for the traffic results at the time of construction.
- The trip data from the identified transport routes (refer Table 6) were then linked to the relevant Road Sections, forming the development related *Increase in AADT from "Actual".*
- The percentage increase between the "Actual" and development related traffic volumes were determined.

A summary of the results from the above assumption and processes can be found in Table 13.

For the data provided by Department of Transport and Main Roads, the results show that most road sections from Port of Cairns to the Project area will be equal to or below the specified 5% traffic impact value.

There are 15 road sections that have been shown to exceed the specified 5% traffic impact value. This is largely attributed to the current underutilisation of the road and a lack of available heavy vehicle data inputs. The majority of traffic loading is expected to be light vehicles for the workers travelling to site or water truck usage (HRV vehicle).

As identified in Table 13, the additional traffic loading from the construction of the development will have minimal impact on the Bruce Highway sections of the state-controlled road network with increases of less than 5%. The majority of the remaining state-controlled road sections were calculated to exceed the 5% traffic impact value, but it is considered that this is due to the relatively short peak construction period (approximately 6 months) and the relatively low number of vehicles currently using the road. It is considered that the calculated vehicles per day (including the existing and calculated Project contribution) is within the capacity of the two-way, two lane sections of state-controlled highways.

Similarly for the Council-controlled Tully Falls Road, the calculated traffic impact value exceed 5%, however it is expected to have the capacity to support the Project's peak construction period. The Council-controlled Wooroora Road, which is of a far lesser quality than the other roads, is calculated to have a significant traffic impact from the Project, which is largely due to the low background traffic on the road. This road, which will require geometric upgrades to accommodate the OSOM vehicles, is expected to require an upgraded pavement and/or maintenance cycle to support the increase in traffic, especially along the unsealed section of the road.

Table 13 – Traffic Impact Assessment Results

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" AADT Traffic Data | Traffic Impact Assessment Results | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | | Development related AADT | Increase in Development AADT from "Actual" (%) |
| **1** | | | Wharf Street | 3902 | 2017 | 0.00% | 3902 | 19 | 0.49 |
| **1** | | | Kenny Street | Data not available | | | | | |
| **1** | 810 | 111643 | Draper Street (Portsmith) | 21481 | 2019 | 0.00% | 22726 | 19 | 0.08 |
| **1** | 10P | 111566 | Comport Street | 19897 | 2019 | 0.00% | 20668 | 19 | 0.09 |
| **1** | 10P | 110030 | Ray Jones Drive | 33251 | 2019 | 1.90% | 37793 | 19 | 0.05 |
| **1** | 10P | 110009 | Bruce Highway (Innisfail - Cairns) | 53554 | 2019 | 1.27% | 56691 | 19 | 0.03 |
| **1** | 10P | 111635 | Bruce Highway (Innisfail - Cairns) | 39918 | 2019 | 4.36% | 40969 | 19 | 0.05 |
| **1** | 10P | 110025 | Bruce Highway (Innisfail - Cairns) | 35032 | 2019 | 1.92% | 35347 | 19 | 0.05 |
| **1** | 10P | 111632 | Bruce Highway (Innisfail - Cairns) | 21213 | 2019 | 0.87% | 22573 | 19 | 0.08 |
| **1** | 10P | 110032 | Bruce Highway (Innisfail - Cairns) | 18783 | 2019 | 0.30% | 19904 | 19 | 0.10 |
| **1** | 10P | 111648 | Bruce Highway (Innisfail - Cairns) | 11798 | 2019 | 2.09% | 13083 | 19 | 0.15 |
| **1** | 10P | 111647 | Bruce Highway (Innisfail - Cairns) | 7442 | 2019 | 1.95% | 7824 | 19 | 0.24 |
| **1** | 10P | 110001 | Bruce Highway (Innisfail - Cairns) | 6001 | 2019 | 3.51% | 6272 | 19 | 0.30 |
| **1** | 10P | 110050 | Bruce Highway (Innisfail - Cairns) | 6212 | 2019 | 1.68% | 6232 | 19 | 0.30 |
| **1** | 10P | 110040 | Bruce Highway (Innisfail - Cairns) | 6970 | 2019 | 1.48% | 6970 | 19 | 0.27 |
| **1, 6** | 21A | 111678 | Palmerston Highway (Innisfail - Ravenshoe) | 3763 | 2019 | 0.11% | 3763 | 260 | 6.90 |

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" AADT Traffic Data | Traffic Impact Assessment Results | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | | Development related AADT | Increase in Development AADT from "Actual" (%) |
| **1, 6** | 21A | 111525 | Palmerston Highway (Innisfail - Ravenshoe) | 1954 | 2019 | 0.00% | 1954 | 260 | 13.29 |
| **1, 6** | 21A | 110218 | Palmerston Highway (Innisfail - Ravenshoe) | 2202 | 2019 | 0.00% | 2287 | 260 | 11.35 |
| **1, 6** | 21A | 110004 | Palmerston Highway (Innisfail - Ravenshoe) | 1375 | 2019 | 0.00% | 1474 | 260 | 17.62 |
| **1, 6** | 641 | 111646 | Millaa Millaa - Milanda Road | 2122 | 2019 | 1.27% | 2331 | 260 | 11.14 |
| **1, 6, 7** | 6404 | 110077 | East Evelyn Road | 404 | 2019 | 2.35% | 508 | 320 | 62.94 |
| **1, 6, 7, 8, 9** | 32B | 111616 | Kennedy Highway (Mareeba - Ravenshoe) | 697 | 2019 | 3.18% | 773 | 475 | 61.42 |
| **1, 6, 7, 8, 9** | 32C | 111496 | Kennedy Highway (Ravenshoe - Mt Garnet) | 1775 | 2019 | 7.93% | 1915 | 475 | 24.79 |
| **1, 5, 6, 7, 8, 9** | CV48T8KV MC56-L5 | | Tully Falls Road | 1564 | 2018 | 3.50% | 1564 | 760 | 48.57 |
| **1, 5, 6, 7, 8, 9** | Q2205BNJ MC56-L4 | | Wooroora Road (Approx CH 400 m) | 667 | 2012 | 2.56% | 667 | 760 | 113.90 |
| **1, 5, 6, 7, 8, 9** | CS916NHM MC56-L5 | | Wooroora Road (Approx CH 10 km) | 117 | 2012 | 0.00% | 117 | 760 | 649.32 |
| **5** | 6605 | 111582 | Grigg Street & Moore Street | 3343 | 2019 | 0.00% | 3343 | 285 | 8.53 |
| **5** | N2404F1A MC56-L5 | | Moffat Street | 2640 | 2013 | 0.00% | 2640 | 285 | 10.80 |

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" AADT Traffic Data | Traffic Impact Assessment Results | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | | Development related AADT | Increase in Development AADT from "Actual" (%) |
| **5** | Transport Route 5 continues into CV48T8KV MC56-L5 (Tully Falls Road) | | | | | | | | |
| **6** | 10P | 111571 | Bruce Highway (Innisfail - Cairns) | 12378 | 2019 | 0.00% | 12378 | 241 | 1.94 |
| **6** | 10P | 111559 | Bruce Highway (Innisfail - Cairns) | 9389 | 2019 | 0.00% | 9389 | 241 | 2.56 |
| **6** | Transport Route 6 continues onto 111678 (Palmerston Highway) | | | | | | | | |
| **7** | 645 | 111581 | James Street | 4164 | 2019 | 1.82% | 4396 | 60 | 1.36 |
| **7** | 641 | 111509 | Patrick Street & Millaa Millaa Road | 2815 | 2019 | 0.00% | 2815 | 60 | 2.13 |
| **7** | Transport Route 7 continues onto 110077 (East Evelyn Road) | | | | | | | | |
| **8** | 32B | 110044 | Main Street | 13823 | 2019 | 3.14% | 15168 | 95 | 0.63 |
| **8** | 32B | 111585 | Kennedy Highway / Robert Street | 7962 | 2019 | 1.65% | 8362 | 95 | 1.14 |
| **8, 9** | 32B | 110003 | Kennedy Highway | 1649 | 2019 | 0.48% | 1673 | 155 | 9.26 |
| **8, 9** | Transport Route 8 and 9 continues into 111616 (Kennedy Highway) | | | | | | | | |
| **9** | 663 | 111512 | Atherton-Herberton Rd / Longlands Gap-Herberton Road | 2090 | 2019 | 0.09% | 2096 | 60 | 2.86 |
| **9** | 665 | 111555 | Longlands Gap-Herberton Road | 2090 | 2019 | 0.10% | 2096 | 60 | 2.86 |
| **9** | 665 | 111530 | Longlands Gap-Herberton Road | 485 | 2019 | 0.00% | 485 | 60 | 12.37 |
| **9** | Transport Route 9 continues into 110003 (Kennedy Highway) | | | | | | | | |

Denotes traffic impact equal to or below the specified 5% value

Denotes traffic impact above the specified 5% value

### 6.3.2 *Pavement Impact Assessment and Mitigation*

The pavement impact assessment incorporated many factors, including:

- "Actual" AADT data using the annual growth rate factors;
- Transport Route data (refer Table 6);
- Trip generation (Appendix B);
- ESA multiplier factors (refer Table 14); and
- Percentage of heavy and light vehicle road usage data.

Table 14 shows the ESA multiplier factors for the wind farm traffic. This ESA data was used to determine the development related traffic ESA values.

Table 14 - ESA Loading Status

| Construction Vehicle Type | Vehicle Classification | Vehicle Class (Austroads) | Axle Count | Load Status (Calculated ESA's 4th Power)[1] | | |
|---|---|---|---|---|---|---|
| | | | | 0% | 50% | 100% |
| **Passenger vehicle** | Light vehicle | 1 | 2 | 0.42 | 1.18 | 3.00 |
| **HRV** | Heavy vehicle | 4 | 3 | 0.51 | 1.27 | 3.58 |
| **Double tanker** | Heavy vehicle | 10 | 9 | 1.69 | 2.8 | 6.91 |
| **Truck and dog** | Heavy vehicle | 10 | 7 | 1.64 | 2.45 | 6.15 |
| **19m AV (tri-axle)** | Heavy vehicle | 9 | 6 | 1.68 | 2.59 | 5.54 |
| **B double** | Heavy vehicle | 10 | 9 | 1.69 | 2.8 | 6.91 |
| **Over dimensional / higher mass limit vehicle (special permit vehicle)** | Over dimensional / higher mass limit vehicle | 12 | 16 | 1.76 | 3.91 | 12.42 |

[1] Load status data extracted from Australian Trucking Association's Technical Advisory Procedure document *"Truck impact chart"*, Edition 2.2, March 2018.

The following assumptions were used to determine accurate existing traffic data ESA classifications:

- Assumed heavy vehicle ESA for the existing traffic data was 3.2; and
- Assumed light vehicle ESA for the existing traffic data was 1.18.

A summary of the results from the above ESA loadings can be found in Table 15.

For the data provided by Department of Transport and Main Roads, the results show that most road sections from Port of Cairns to the wind turbine area will be equal to or below the specified 5% pavement impact value.

There are 16 road sections that have been shown to exceed the specified 5% pavement impact value. This may be attributed to the current underutilisation of the road and the lack of heavy vehicle data inputs available for one of the roads and limited usage of heavy in comparison to light vehicles on low trafficked roads. The majority of traffic loading is expected to be light vehicles for the workers travelling to site or water truck usage (HRV vehicle).

As identified in Table 15, the additional traffic loading from the construction of the development will have minimal impact on the Bruce Highway sections of the state-controlled road network with increases of less than 5%. Many of the other state-controlled road sections were calculated to exceed the 5% pavement impact value, but it is considered that this is due to the relatively short peak construction period (approximately 6 months) and the relatively low background traffic utilising the roads. It is considered that the calculated vehicles per day (including the existing and calculated Project contribution) is within the capacity of the two-way, two lane sections of state-controlled highways.

Similarly for the Council-controlled Tully Falls Road, the calculated pavement impact value exceed 5%, however it is expected to have the capacity to support the Project's peak construction period. The Council-controlled Wooroora Road, which is of a far lesser quality than the other roads, is calculated to have a significant pavement impact from the Project, which is largely due to the low background traffic on the road. This road, which will require geometric upgrades to accommodate the OSOM vehicles, is expected to require an upgraded pavement and/or maintenance cycle to support to increase in traffic, especially along the unsealed area of the road.

Table 15 - Pavement Impact Assessment Results

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" Traffic Data | | Pavement Impact Result Assessment | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | AADT | "Actual" traffic ESA | Development related ESA | ESA increase from "Actual" (%) |
| 1 | | | Wharf Street | 3902 | 2017 | 0.00% | 3902 | 5248 | 117 | 2.37 |
| 1 | | | Kenny Street | Data not available | | | | | | |
| 1 | 810 | 111643 | Draper Street (Portsmith) | 21481 | 2019 | 0.00% | 22726 | 29424 | 117 | 0.42 |
| 1 | 10P | 111566 | Comport Street | 19897 | 2019 | 0.00% | 20668 | 26525 | 117 | 0.47 |
| 1 | 10P | 110030 | Ray Jones Drive | 33251 | 2019 | 1.90% | 37793 | 49291 | 117 | 0.25 |
| 1 | 10P | 110009 | Bruce Highway (Innisfail - Cairns) | 53554 | 2019 | 1.27% | 56691 | 74271 | 117 | 0.17 |
| 1 | 10P | 111635 | Bruce Highway (Innisfail - Cairns) | 39918 | 2019 | 4.36% | 40969 | 61279 | 117 | 0.20 |
| 1 | 10P | 110025 | Bruce Highway (Innisfail - Cairns) | 35032 | 2019 | 1.92% | 35347 | 46101 | 117 | 0.27 |
| 1 | 10P | 111632 | Bruce Highway (Innisfail - Cairns) | 21213 | 2019 | 0.87% | 22573 | 30397 | 117 | 0.41 |
| 1 | 10P | 110032 | Bruce Highway (Innisfail - Cairns) | 18783 | 2019 | 0.30% | 19904 | 26751 | 117 | 0.47 |
| 1 | 10P | 111648 | Bruce Highway (Innisfail - Cairns) | 11798 | 2019 | 2.09% | 13083 | 17928 | 117 | 0.69 |
| 1 | 10P | 111647 | Bruce Highway (Innisfail - Cairns) | 7442 | 2019 | 1.95% | 7824 | 10889 | 117 | 1.14 |
| 1 | 10P | 110001 | Bruce Highway (Innisfail - Cairns) | 6001 | 2019 | 3.51% | 6272 | 9115 | 117 | 1.37 |
| 1 | 10P | 110050 | Bruce Highway (Innisfail - Cairns) | 6212 | 2019 | 1.68% | 6232 | 8859 | 117 | 1.41 |
| 1 | 10P | 110040 | Bruce Highway (Innisfail - Cairns) | 6970 | 2019 | 1.48% | 6970 | 9906 | 117 | 1.26 |

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" Traffic Data | | Pavement Impact Result Assessment | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | AADT | "Actual" traffic ESA | Development related ESA | ESA increase from "Actual" (%) |
| **1, 6** | 21A | 111678 | Palmerston Highway (Innisfail - Ravenshoe) | 3763 | 2019 | 0.11% | 3763 | 5128 | 840 | 16.52 |
| **1, 6** | 21A | 111525 | Palmerston Highway (Innisfail - Ravenshoe) | 1954 | 2019 | 0.00% | 1954 | 2958 | 840 | 28.64 |
| **1, 6** | 21A | 110218 | Palmerston Highway (Innisfail - Ravenshoe) | 2202 | 2019 | 0.00% | 2287 | 3724 | 840 | 22.74 |
| **1, 6** | 21A | 110004 | Palmerston Highway (Innisfail - Ravenshoe) | 1375 | 2019 | 0.00% | 1474 | 2444 | 840 | 34.66 |
| **1, 6** | 641 | 111646 | Millaa Millaa - Milanda Road | 2122 | 2019 | 1.27% | 2331 | 3729 | 840 | 22.72 |
| **1, 6, 7** | 6404 | 110077 | East Evelyn Road | 404 | 2019 | 2.35% | 508 | 878 | 1020 | 116.98 |
| **1, 6, 7, 8, 9** | 32B | 111616 | Kennedy Highway (Mareeba - Ravenshoe) | 697 | 2019 | 3.18% | 773 | 1094 | 1398 | 128.50 |
| **1, 6, 7, 8, 9** | 32C | 111496 | Kennedy Highway (Ravenshoe - Mt Garnet) | 1775 | 2019 | 7.93% | 1915 | 2889 | 1398 | 48.64 |
| **1, 5, 6, 7, 8, 9** | CV48T8KV MC56-L5 | | Tully Falls Road | 1564 | 2018 | 3.50% | 1564 | 2067 | 2255 | 109.44 |
| **1, 5, 6, 7, 8, 9** | Q2205BNJ MC56-L4 | | Wooroora Road (Approx CH 400 m) | 667 | 2012 | 2.56% | 667 | 884 | 2255 | 255.84 |
| **1, 5, 6, 7, 8, 9** | CS916NHM MC56-L5 | | Wooroora Road (Approx CH 10 km) | 117 | 2012 | 0.00% | 117 | 162 | 856 | 527.38 |
| **5** | 6605 | 111582 | Grigg Street & Moore Street | 3343 | 2019 | 0.00% | 3343 | 4483 | 856 | 19.11 |
| **5** | N2404F1A MC56-L5 | | Moffat Street | 2640 | 2013 | 0.00% | 2640 | 3579 | 856 | 23.93 |
| **5** | Transport Route 5 continues into CV48T8KV MC56-L5 (Tully Falls Road) | | | | | | | | | |

| Transport Route | Road section ID | Site ID | Road section name | Available Traffic Data | | | "Actual" Traffic Data | | Pavement Impact Result Assessment | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AADT | Data Year | Annual growth Rate | AADT | "Actual" traffic ESA | Development related ESA | ESA increase from "Actual" (%) |
| **6** | 10P | 111571 | Bruce Highway (Innisfail - Cairns) | 12378 | 2019 | 0.00% | 12378 | 16926 | 723 | 4.27 |
| **6** | 10P | 111559 | Bruce Highway (Innisfail - Cairns) | 9389 | 2019 | 0.00% | 9389 | 12947 | 723 | 5.58 |
| **6** | Transport Route 6 continues onto 111678 (Palmerston Highway) | | | | | | | | | |
| **7** | 645 | 111581 | James Street | 4164 | 2019 | 1.82% | 4396 | 6309 | 180 | 2.85 |
| **7** | 641 | 111509 | Patrick Street & Millaa Millaa Road | 2815 | 2019 | 0.00% | 2815 | 4249 | 180 | 4.24 |
| **7** | Transport Route 7 continues onto 110077 (East Evelyn Road) | | | | | | | | | |
| **8** | 32B | 110044 | Main Street | 13823 | 2019 | 3.14% | 15168 | 19666 | 288 | 1.47 |
| **8** | 32B | 111585 | Kennedy Highway / Robert Street | 7962 | 2019 | 1.65% | 8362 | 10641 | 378 | 3.55 |
| **8, 9** | 32B | 110003 | Kennedy Highway | 1649 | 2019 | 0.48% | 1673 | 2388 | 288 | 12.07 |
| **8, 9** | Transport Route 8 and 9 continues into 111616 (Kennedy Highway) | | | | | | | | | |
| **9** | 663 | 111512 | Atherton-Herberton Rd / Longlands Gap-Herberton Road | 2090 | 2019 | 0.09% | 2096 | 2752 | 90 | 3.27 |
| **9** | 665 | 111555 | Longlands Gap-Herberton Road | 2090 | 2019 | 0.10% | 2096 | 2752 | 90 | 3.27 |
| **9** | 665 | 111530 | Longlands Gap-Herberton Road | 485 | 2019 | 0.00% | 485 | 692 | 90 | 13.01 |
| **9** | Transport Route 9 continues into 110003 (Kennedy Highway) | | | | | | | | | |

Denotes pavement impact equal to or below the specified 5% value

Denotes pavement impact above the specified 5% value

### 6.4 Operational Phase Road Impact Assessment

The completed wind farm is expected to employ up to 15 staff who will be on site conducting routine maintenance, with 10% assumed to carpool. It is anticipated that the staff will travel from either Innisfail or Ravenshoe to the site each day.

With the limited staffing numbers and very few visitors expected at the site, it is considered that the traffic impacts will be negligible with no more than 27 daily two-way trips generated by the wind farm, including deliveries.

### 6.5 Additional Mitigation and Control Measures

It is recommended that the following upgrades and measures be undertaken to facilitate this Project:

- Conduct Pre and Post Construction Visual Dilapidation Survey and report from the Kennedy Highway / Tully Falls Road intersection through to the Project site entrance.
- Develop and implement a Traffic Management Plan with appropriate controls and signage for Tully Falls Road and Wooroora Road through to the Project site entrance. This is to be completed once a Contractor has been chosen for the works.
- Repair damage to the surface of Tully Falls Road and Wooroora Road, if damage has been caused from construction traffic.
- All unsealed authority roads along Wooroora Road are to be constructed to a standard required for construction of this Project. If any roads are unsealed, dust control measures are to be implemented to the Project site entrance.

It is considered that these measures will be appropriate to mitigate the long-term and short-term traffic impacts of this development proposal.

It is anticipated that the conditions of any development permit for this Project will require a revised Traffic Impact Assessment to be prepared in consultation with DTMR and local councils. This revised TIA should include further detailed information in relation to delivering the measures identified above.

## 7 Conclusions and Recommendations

This report represents the Traffic Impact Assessment of the proposed Chalumbin Wind Farm located some 20 km south of Ravenshoe, Queensland. For the purpose of this assessment the wind farm is intended to be built in a single stage, with the Project construction period to be over approximately 18 – 24 months.

Assessment of the traffic impact of the wind farm was considered in two phases of the Project: construction and operation. The impacts of these phases were considered for the following elements:

- Impacts on traffic operation; and
- Impacts on the pavement condition.

The identified transport routes and trip generation were used to determine the relative impacts. It was found that 15 of the specified route sections had traffic impacts exceeding the 5% impact increase, while 16 of the route sections had pavement impacts exceeding the specified 5% impact increase. These can be attributed to the current underutilisation of the road and the limited data in some areas. The traffic and pavement impacts are not expected to be significant due to short construction time frames (of the peak traffic period compared to the overall construction program) and the majority of vehicle traffic being worker transport in light vehicles.

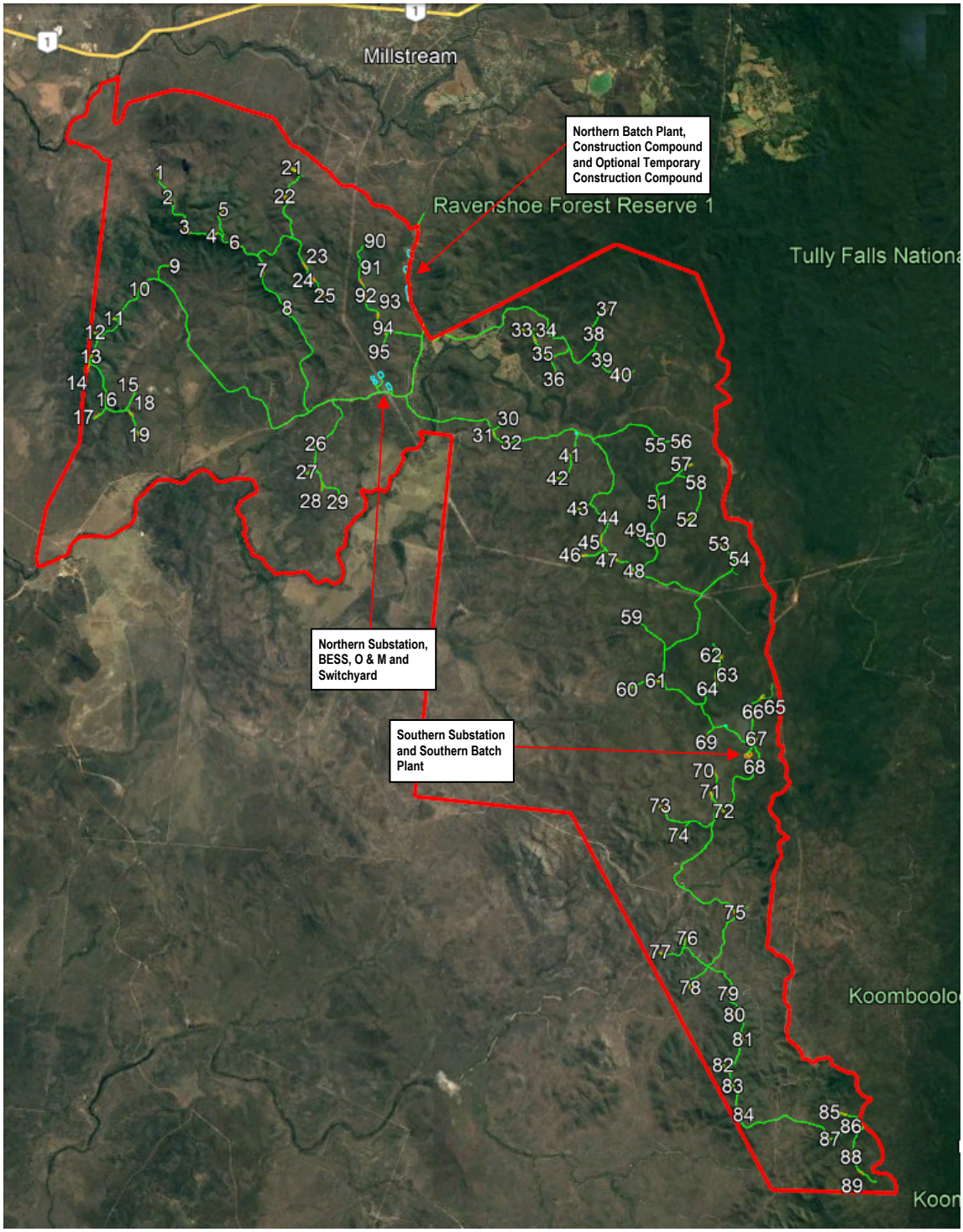
The main intersection expected to be affected by the development during construction is that of Kennedy Highway / Tully Falls Road.

Further construction phase controls are recommended as outlined in Section 6.5 of this report.

This report is preliminary at this stage. Once the Project reaches the detailed design stage of works and a Contractor has been engaged, the results of this report should be re-assessed to either confirm the impact results or provide amended outcomes.

This report demonstrates that, with the incorporation of the recommended mitigation measures, the Project can comply with Performance Outcome 6 and Performance Outcome 13 of State Code 23.

# Appendix A – Preliminary Wind Farm Layout



# Appendix B – Trip Generation Data

| Phase 1 - Material Deliveries and Construction (Peak Traffic) | | | | Morning Peak Hour | | | | | Evening Peak Hour | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description | Vehicle Type | Daily One-way Vehicle Trips | Proportion of Trips in Peak Hour | % In | Trips In | % Out | Trips Out | Total Trips | % In | Trips In | % Out | Trips Out | Total Trips |
| Workers | Light vehicle | 300 | 90% | 100% | 270 | 0% | 0 | 270 | 0% | 0 | 100% | 270 | 270 |
| Water Truck | HV - HRV | 25 | 10% | 66% | 2 | 66% | 2 | 4 | 33% | 1 | 33% | 1 | 2 |
| Cement tanker | HV - Double Tanker | 2 | 20% | 50% | 1 | 50% | 1 | 2 | 50% | 1 | 50% | 1 | 2 |
| Flyash Deliveries | HV - Double Tanker | 1 | 20% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Silica Fume Deliveries | HV - Double Tanker | 1 | 20% | 50% | 1 | 50% | 1 | 2 | 50% | 1 | 50% | 1 | 2 |
| 20mm concrete aggregate | HV - Truck and Dog | 6 | 20% | 66% | 1 | 66% | 1 | 2 | 33% | 1 | 33% | 1 | 2 |
| 10mm concrete aggregate | HV - Truck and Dog | 4 | 20% | 66% | 1 | 66% | 1 | 2 | 33% | 1 | 33% | 1 | 2 |
| Gravel | HV - Truck and Dog | 9 | 20% | 66% | 2 | 66% | 2 | 4 | 33% | 1 | 33% | 1 | 2 |
| 14mm sealing aggregate | HV - Truck and Dog | 0 | 20% | 66% | 0 | 66% | 0 | 0 | 33% | 0 | 33% | 0 | 0 |
| 7mm sealing aggregate | HV - Truck and Dog | 0 | 20% | 66% | 0 | 66% | 0 | 0 | 33% | 0 | 33% | 0 | 0 |
| Riversand Deliveries | HV - Truck and Dog | 5 | 20% | 66% | 1 | 66% | 1 | 2 | 33% | 1 | 33% | 1 | 2 |
| Crusherdust Deliveries | HV - Truck and Dog | 4 | 20% | 66% | 1 | 66% | 1 | 2 | 33% | 1 | 33% | 1 | 2 |
| RCP deliveries | HV - 19m AV (tri-axle) | 1 | 20% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Formwork | HV - 19m AV (tri-axle) | 1 | 20% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Steel embedments & Met Masts | HV - 19m AV (tri-axle) | 2 | 50% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Steel reinforcement | HV - B Double | 1 | 20% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Electrical Cable Underground | HV - B Double | 2 | 20% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Electrical Overhead Lines | HV - B Double | 2 | 100% | 100% | 2 | 100% | 2 | 4 | 0% | 0 | 0% | 0 | 0 |
| Electrical OHL Equipment | HV - B Double | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Power Poles | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| Electrical - Transformers | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 1 | 0% | 1 | 2 |
| Electrical - Switch Room | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 1 | 0% | 1 | 2 |
| WTG's - Blade deliveries | (O.D.) over-dimensional | 2 | 100% | 100% | 2 | 100% | 2 | 4 | 0% | 0 | 0% | 0 | 0 |
| WTG's - Nacelle deliveries | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| WTG's - Hub deliveries | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| WTG's - Tower (5 sections) | (O.D.) over-dimensional | 2 | 100% | 100% | 2 | 100% | 2 | 4 | 0% | 0 | 0% | 0 | 0 |
| Cranes | (O.D.) over-dimensional | 2 | 50% | 50% | 1 | 50% | 1 | 2 | 50% | 1 | 50% | 1 | 2 |
| Portable Buildings | (O.D.) over-dimensional | 1 | 100% | 100% | 1 | 100% | 1 | 2 | 0% | 0 | 0% | 0 | 0 |
| | | | | | | | | | | | | | |
| **Total** | | **379** | | | **300** | | **30** | **330** | | **11** | | **281** | **292** |
| **% Light Vehicles** | | | | | | | | **82%** | | | | | **92%** |

| Phase 2 - Operations | | | | Morning Peak Hour | | | | | Evening Peak Hour | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description | Vehicle Type | Daily One-way Vehicle Trips | Proportion of Trips in Each Peak Hour | % In | Trips In | % Out | Trips Out | Total Trips | % In | Trips In | % Out | Trips Out | Total Trips |
| Workers | Light vehicle | 14 | 100% | 100% | 14 | 0% | 0 | 14 | 0% | 0 | 100% | 14 | 14 |
| Deliveries or maintenance | MRV | 2 | 100% | 50% | 1 | 50% | 1 | 2 | 50% | 1 | 50% | 1 | 2 |
| **Total** | | **14** | | | **15** | | **1** | **16** | | **1** | | **15** | **16** |
| **% Light Vehicles** | | | | | | | | **88%** | | | | | **88%** |

# Appendix C – Local Council Traffic Data

Wharf Street Data:

| STREET | SUBURB | ROAD BLOCK - CROSS STREETS | Start_Date | End_Date | Days | _7_Day_Average | Weekday_Average | AM_Peak_Time |
|---|---|---|---|---|---|---|---|---|
| Wharf Street | Cairns City | Wharf Street between Marlin Parade and Abbott St | 05/05/2017 | 12/05/2017 | 7.00 | 3901.7 | 4096.2 | 11 - 12 |

| AM_Peak_Volume | PM_Peak_Time | PM_Peak_Volume | Posted_Speed | _85Percent_Km_Hr | 20Km/Hr Pace | Max Km Hr | Class 2% | Class +4% (Heavy) |
|---|---|---|---|---|---|---|---|---|
| 270.2 | 5 - 6 | 319.4 | 50 | 41.4 | 24 - 44 | 133.5 | 90.00% | 8.16% |

*Additional data shown overleaf*

# MetroCount Traffic Executive
# Daily Classes

**DailyClass-43 -- English (ENA)**

**Datasets:**

| | |
|---|---|
| **Site:** | **[Moffatt Street] Ch 15@ Inter Moore Street< 50>** |
| **Attribute:** | Ravenshoe |
| **Direction:** | 6 - West bound A>B, East bound B>A. **Lane:** 0 |
| **Survey Duration:** | 12:38 Monday, 2 September 2013 => 14:17 Tuesday, 17 September 2013, |
| **Zone:** | |
| **File:** | Moffatt Street17Sep2013.EC0 (Plus ) |
| **Identifier:** | N2404F1A MC56-L5 [MC55] (c)Microcom 19Oct04 |
| **Algorithm:** | Factory default axle (v5.02) |
| **Data type:** | Axle sensors - Paired (Class/Speed/Count) |

**Profile:**

| | |
|---|---|
| **Filter time:** | **12:39 Monday, 2 September 2013 => 14:17 Tuesday, 17 September 2013** |
| **(15.0683)** | |
| **Included classes:** | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| **Speed range:** | 10 - 160 km/h. |
| **Direction:** | North, East, South, West (bound), P = East, Lane = 0-16 |
| **Separation:** | Headway > 0 sec, Span 0 - 100 metre |
| **Name:** | Default Profile |
| **Scheme:** | Vehicle classification (AustRoads94) |
| **Units:** | Metric (metre, kilometre, m/s, km/h, kg, tonne) |
| **In profile:** | Vehicles = 35672 / 35816 (99.60%) |

# Daily Classes

**DailyClass-43**
**Site:** Moffatt Street.0.1WE
**Description:** **Ch 15@ Inter Moore Street< 50>**
**Filter time:** **12:39 Monday, 2 September 2013 => 14:17 Tuesday, 17 September 2013**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 2 September 2013**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon*** | 946 | 15 | 54 | 21 | 6 | 2 | 0 | 0 | 10 | 1 | 0 | 0 | 1055 |
| (%) | 89.7 | 1.4 | 5.1 | 2.0 | 0.6 | 0.2 | 0.0 | 0.0 | 0.9 | 0.1 | 0.0 | 0.0 | |
| **Tue** | 2400 | 27 | 166 | 51 | 16 | 3 | 5 | 0 | 11 | 3 | 0 | 0 | 2682 |
| (%) | 89.5 | 1.0 | 6.2 | 1.9 | 0.6 | 0.1 | 0.2 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | |
| **Wed** | 2338 | 47 | 159 | 68 | 17 | 3 | 4 | 3 | 14 | 11 | 0 | 0 | 2664 |
| (%) | 87.8 | 1.8 | 6.0 | 2.6 | 0.6 | 0.1 | 0.2 | 0.1 | 0.5 | 0.4 | 0.0 | 0.0 | |
| **Thu** | 2516 | 55 | 160 | 56 | 5 | 1 | 3 | 1 | 13 | 6 | 0 | 0 | 2816 |
| (%) | 89.3 | 2.0 | 5.7 | 2.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | |
| **Fri** | 2541 | 45 | 173 | 64 | 10 | 1 | 5 | 3 | 9 | 6 | 0 | 0 | 2857 |
| (%) | 88.9 | 1.6 | 6.1 | 2.2 | 0.4 | 0.0 | 0.2 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | |
| **Sat** | 2139 | 39 | 88 | 35 | 8 | 2 | 2 | 1 | 6 | 0 | 0 | 0 | 2320 |
| (%) | 92.2 | 1.7 | 3.8 | 1.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 1489 | 51 | 56 | 25 | 2 | 2 | 3 | 3 | 4 | 0 | 0 | 0 | 1635 |
| (%) | 91.1 | 3.1 | 3.4 | 1.5 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 2237 | 44 | 134 | 50 | 10 | 2 | 4 | 2 | 10 | 4 | 0 | 0 | 2496 |
| (%) | 89.6 | 1.8 | 5.4 | 2.0 | 0.4 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 2449 | 44 | 165 | 60 | 12 | 2 | 4 | 2 | 12 | 7 | 0 | 0 | 2755 |
| (%) | 88.9 | 1.6 | 6.0 | 2.2 | 0.4 | 0.1 | 0.2 | 0.1 | 0.4 | 0.2 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 1814 | 45 | 72 | 30 | 5 | 2 | 3 | 2 | 5 | 0 | 0 | 0 | 1978 |
| (%) | 91.7 | 2.3 | 3.6 | 1.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-43**
**Site:** Moffatt Street.0.1WE
**Description:** **Ch 15@ Inter Moore Street< 50>**
**Filter time:** **12:39 Monday, 2 September 2013 => 14:17 Tuesday, 17 September 2013**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 9 September 2013**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 2614 | 51 | 136 | 60 | 25 | 1 | 7 | 5 | 42 | 18 | 0 | 0 | 2959 |
| (%) | 88.3 | 1.7 | 4.6 | 2.0 | 0.8 | 0.0 | 0.2 | 0.2 | 1.4 | 0.6 | 0.0 | 0.0 | |
| **Tue** | 2639 | 39 | 166 | 72 | 29 | 4 | 3 | 5 | 12 | 14 | 1 | 0 | 2984 |
| (%) | 88.4 | 1.3 | 5.6 | 2.4 | 1.0 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.0 | 0.0 | |
| **Wed** | 2490 | 54 | 173 | 66 | 17 | 0 | 3 | 3 | 12 | 3 | 0 | 0 | 2821 |
| (%) | 88.3 | 1.9 | 6.1 | 2.3 | 0.6 | 0.0 | 0.1 | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | |
| **Thu** | 2632 | 40 | 164 | 69 | 13 | 1 | 6 | 2 | 20 | 3 | 0 | 0 | 2950 |
| (%) | 89.2 | 1.4 | 5.6 | 2.3 | 0.4 | 0.0 | 0.2 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | |
| **Fri** | 2807 | 70 | 144 | 74 | 24 | 1 | 6 | 3 | 21 | 5 | 0 | 0 | 3155 |
| (%) | 89.0 | 2.2 | 4.6 | 2.3 | 0.8 | 0.0 | 0.2 | 0.1 | 0.7 | 0.2 | 0.0 | 0.0 | |
| **Sat** | 1494 | 33 | 59 | 18 | 1 | 1 | 3 | 0 | 11 | 2 | 0 | 0 | 1622 |
| (%) | 92.1 | 2.0 | 3.6 | 1.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.7 | 0.1 | 0.0 | 0.0 | |
| **Sun** | 1027 | 35 | 50 | 15 | 3 | 1 | 0 | 0 | 12 | 0 | 0 | 0 | 1143 |
| (%) | 89.9 | 3.1 | 4.4 | 1.3 | 0.3 | 0.1 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 2243 | 46 | 127 | 53 | 16 | 1 | 4 | 3 | 19 | 6 | 0 | 0 | 2519 |
| (%) | 89.0 | 1.8 | 5.1 | 2.1 | 0.6 | 0.1 | 0.2 | 0.1 | 0.7 | 0.3 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 2636 | 51 | 157 | 68 | 22 | 1 | 5 | 4 | 21 | 9 | 0 | 0 | 2974 |
| (%) | 88.7 | 1.7 | 5.3 | 2.3 | 0.7 | 0.0 | 0.2 | 0.1 | 0.7 | 0.3 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 1261 | 34 | 55 | 17 | 2 | 1 | 2 | 0 | 12 | 1 | 0 | 0 | 1383 |
| (%) | 91.2 | 2.5 | 3.9 | 1.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.8 | 0.1 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-43**
**Site:** Moffatt Street.0.1WE
**Description:** **Ch 15@ Inter Moore Street< 50>**
**Filter time:** **12:39 Monday, 2 September 2013 => 14:17 Tuesday, 17 September 2013**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 16 September 2013**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 1644 | 43 | 96 | 40 | 3 | 0 | 0 | 2 | 11 | 2 | 1 | 0 | 1842 |
| (%) | 89.3 | 2.3 | 5.2 | 2.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.6 | 0.1 | 0.1 | 0.0 | |
| **Tue*** | 142 | 2 | 12 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 167 |
| (%) | 85.0 | 1.2 | 7.2 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

**Entire week**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1644 | 43 | 96 | 40 | 3 | 0 | 0 | 2 | 11 | 2 | 1 | 0 | 1842 |
| (%) | 89.3 | 2.3 | 5.2 | 2.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.6 | 0.1 | 0.1 | 0.0 | |

**Weekdays**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1644 | 43 | 96 | 40 | 3 | 0 | 0 | 2 | 11 | 2 | 1 | 0 | 1842 |
| (%) | 89.3 | 2.3 | 5.2 | 2.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.6 | 0.1 | 0.1 | 0.0 | |

**Weekend** No complete days.

*** - Incomplete**

# MetroCount Traffic Executive
# Daily Classes

**DailyClass-44 -- English (ENA)**

**Datasets:**

| | |
|---|---|
| **Site:** | **[Monument St] Ch 90 @ Intersection Grigg St<60>** |
| **Attribute:** | Ravenshoe |
| **Direction:** | 1 - North bound, A trigger first. **Lane:** 0 |
| **Survey Duration:** | 8:50 Monday, 28 August 2017 => 7:56 Tuesday, 12 September 2017, |
| **Zone:** | |
| **File:** | Monument St 0 2017-09-12 0755.EC0 (Plus ) |
| **Identifier:** | HN319R47 MC56-L5 [MC55] (c)Microcom 19Oct04 |
| **Algorithm:** | Factory default axle (v5.02) |
| **Data type:** | Axle sensors - Paired (Class/Speed/Count) |

**Profile:**

| | |
|---|---|
| **Filter time:** | **8:51 Monday, 28 August 2017 => 7:56 Tuesday, 12 September 2017 (14.9619)** |
| **Included classes:** | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| **Speed range:** | 10 - 160 km/h. |
| **Direction:** | North, East, South, West (bound), P = North, Lane = 0-16 |
| **Separation:** | Headway > 0 sec, Span 0 - 100 metre |
| **Name:** | Default Profile |
| **Scheme:** | Vehicle classification (AustRoads94) |
| **Units:** | Metric (metre, kilometre, m/s, km/h, kg, tonne) |
| **In profile:** | Vehicles = 3124 / 3146 (99.30%) |

# Daily Classes

**DailyClass-44**
**Site:** Monument St.0.0N
**Description:** **Ch 90 @ Intersection Grigg St<60>**
**Filter time:** **8:51 Monday, 28 August 2017 => 7:56 Tuesday, 12 September 2017**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 28 August 2017**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon*** | 116 | 4 | 8 | 28 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 158 |
| (%) | 73.4 | 2.5 | 5.1 | 17.7 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 185 | 11 | 14 | 43 | 1 | 0 | 0 | 0 | 7 | 5 | 0 | 0 | 266 |
| (%) | 69.5 | 4.1 | 5.3 | 16.2 | 0.4 | 0.0 | 0.0 | 0.0 | 2.6 | 1.9 | 0.0 | 0.0 | |
| **Wed** | 188 | 4 | 17 | 29 | 2 | 0 | 0 | 0 | 19 | 14 | 0 | 0 | 273 |
| (%) | 68.9 | 1.5 | 6.2 | 10.6 | 0.7 | 0.0 | 0.0 | 0.0 | 7.0 | 5.1 | 0.0 | 0.0 | |
| **Thu** | 176 | 6 | 11 | 34 | 7 | 0 | 0 | 0 | 21 | 9 | 0 | 0 | 264 |
| (%) | 66.7 | 2.3 | 4.2 | 12.9 | 2.7 | 0.0 | 0.0 | 0.0 | 8.0 | 3.4 | 0.0 | 0.0 | |
| **Fri** | 178 | 8 | 33 | 19 | 3 | 0 | 0 | 0 | 25 | 5 | 0 | 0 | 271 |
| (%) | 65.7 | 3.0 | 12.2 | 7.0 | 1.1 | 0.0 | 0.0 | 0.0 | 9.2 | 1.8 | 0.0 | 0.0 | |
| **Sat** | 115 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| (%) | 87.1 | 6.8 | 6.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 92 | 6 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 102 |
| (%) | 90.2 | 5.9 | 2.0 | 0.0 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 156 | 7 | 14 | 21 | 2 | 0 | 0 | 0 | 12 | 6 | 0 | 0 | 218 |
| (%) | 71.4 | 3.4 | 6.5 | 9.6 | 1.1 | 0.1 | 0.0 | 0.0 | 5.5 | 2.5 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 182 | 7 | 19 | 31 | 3 | 0 | 0 | 0 | 18 | 8 | 0 | 0 | 269 |
| (%) | 67.7 | 2.7 | 7.0 | 11.6 | 1.2 | 0.0 | 0.0 | 0.0 | 6.7 | 3.1 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 104 | 8 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| (%) | 88.5 | 6.4 | 4.3 | 0.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-44**
**Site:** Monument St.0.0N
**Description:** **Ch 90 @ Intersection Grigg St<60>**
**Filter time:** **8:51 Monday, 28 August 2017 => 7:56 Tuesday, 12 September 2017**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 4 September 2017**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 162 | 5 | 19 | 22 | 5 | 0 | 0 | 0 | 9 | 15 | 0 | 0 | 237 |
| (%) | 68.4 | 2.1 | 8.0 | 9.3 | 2.1 | 0.0 | 0.0 | 0.0 | 3.8 | 6.3 | 0.0 | 0.0 | |
| **Tue** | 132 | 8 | 14 | 20 | 6 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 186 |
| (%) | 71.0 | 4.3 | 7.5 | 10.8 | 3.2 | 0.0 | 0.0 | 0.0 | 2.7 | 0.5 | 0.0 | 0.0 | |
| **Wed** | 164 | 4 | 9 | 66 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 247 |
| (%) | 66.4 | 1.6 | 3.6 | 26.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | |
| **Thu** | 144 | 8 | 18 | 24 | 1 | 0 | 0 | 0 | 5 | 8 | 0 | 0 | 208 |
| (%) | 69.2 | 3.8 | 8.7 | 11.5 | 0.5 | 0.0 | 0.0 | 0.0 | 2.4 | 3.8 | 0.0 | 0.0 | |
| **Fri** | 192 | 9 | 19 | 26 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 248 |
| (%) | 77.4 | 3.6 | 7.7 | 10.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | |
| **Sat** | 112 | 9 | 7 | 8 | 2 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 147 |
| (%) | 76.2 | 6.1 | 4.8 | 5.4 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 6.1 | 0.0 | 0.0 | |
| **Sun** | 85 | 14 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 |
| (%) | 79.4 | 13.1 | 2.8 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 142 | 8 | 13 | 24 | 2 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 197 |
| (%) | 71.8 | 4.1 | 6.4 | 12.4 | 1.2 | 0.0 | 0.0 | 0.0 | 1.7 | 2.4 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 159 | 7 | 16 | 32 | 3 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 225 |
| (%) | 70.5 | 3.0 | 7.0 | 14.0 | 1.2 | 0.0 | 0.0 | 0.0 | 2.0 | 2.1 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 99 | 12 | 5 | 7 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 127 |
| (%) | 77.6 | 9.1 | 3.9 | 5.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-44**
**Site:** Monument St.0.0N
**Description:** **Ch 90 @ Intersection Grigg St<60>**
**Filter time:** **8:51 Monday, 28 August 2017 => 7:56 Tuesday, 12 September 2017**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 11 September 2017**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 147 | 10 | 17 | 33 | 1 | 0 | 0 | 0 | 21 | 23 | 0 | 0 | 252 |
| (%) | 58.3 | 4.0 | 6.7 | 13.1 | 0.4 | 0.0 | 0.0 | 0.0 | 8.3 | 9.1 | 0.0 | 0.0 | |
| **Tue*** | 17 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 26 |
| (%) | 65.4 | 7.7 | 0.0 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 11.5 | 11.5 | 0.0 | 0.0 | |
| **Wed*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 147 | 10 | 17 | 33 | 1 | 0 | 0 | 0 | 21 | 23 | 0 | 0 | 252 |
| (%) | 58.3 | 4.0 | 6.7 | 13.1 | 0.4 | 0.0 | 0.0 | 0.0 | 8.3 | 9.1 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 147 | 10 | 17 | 33 | 1 | 0 | 0 | 0 | 21 | 23 | 0 | 0 | 252 |
| (%) | 58.3 | 4.0 | 6.7 | 13.1 | 0.4 | 0.0 | 0.0 | 0.0 | 8.3 | 9.1 | 0.0 | 0.0 | |

**Weekend** No complete days.

*** - Incomplete**

# MetroCount Traffic Executive
# Daily Classes

**DailyClass-42 -- English (ENA)**

**Datasets:**

| | |
|---|---|
| **Site:** | **[Tully Falls Rd] Ch 195 @ Intersection Kennedy Highway <60>** |
| **Attribute:** | Ravenshoe |
| **Direction:** | 8 - East bound A>B, West bound B>A. **Lane:** 0 |
| **Survey Duration:** | 14:36 Monday, 26 February 2018 => 7:55 Tuesday, 6 March 2018, |
| **Zone:** | |
| **File:** | Tully Falls Rd 0 2018-03-06 0756.EC0 (Plus ) |
| **Identifier:** | CV48T8KV MC56-L5 [MC55] (c)Microcom 19Oct04 |
| **Algorithm:** | Factory default axle (v5.02) |
| **Data type:** | Axle sensors - Paired (Class/Speed/Count) |

**Profile:**

| | |
|---|---|
| **Filter time:** | **14:37 Monday, 26 February 2018 => 7:55 Tuesday, 6 March 2018 (7.7213)** |
| **Included classes:** | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| **Speed range:** | 10 - 160 km/h. |
| **Direction:** | North, East, South, West (bound), P = East, Lane = 0-16 |
| **Separation:** | Headway > 0 sec, Span 0 - 100 metre |
| **Name:** | Default Profile |
| **Scheme:** | Vehicle classification (AustRoads94) |
| **Units:** | Metric (metre, kilometre, m/s, km/h, kg, tonne) |
| **In profile:** | Vehicles = 10377 / 10379 (99.98%) |

# Daily Classes

**DailyClass-42**
**Site:** Tully Falls Rd.0.1EW
**Description:** **Ch 195 @ Intersection Kennedy Highway <60>**
**Filter time:** **14:37 Monday, 26 February 2018 => 7:55 Tuesday, 6 March 2018**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 26 February 2018**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 705 | 17 | 53 | 2 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 781 |
| (%) | 90.3 | 2.2 | 6.8 | 0.3 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | |
| **Wed** | 1555 | 42 | 101 | 6 | 0 | 1 | 4 | 0 | 9 | 0 | 0 | 0 | 1718 |
| (%) | 90.5 | 2.4 | 5.9 | 0.3 | 0.0 | 0.1 | 0.2 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | |
| **Thu** | 1551 | 25 | 118 | 7 | 0 | 2 | 1 | 0 | 10 | 2 | 0 | 0 | 1716 |
| (%) | 90.4 | 1.5 | 6.9 | 0.4 | 0.0 | 0.1 | 0.1 | 0.0 | 0.6 | 0.1 | 0.0 | 0.0 | |
| **Fri** | 1536 | 53 | 91 | 5 | 1 | 3 | 4 | 0 | 6 | 2 | 0 | 0 | 1701 |
| (%) | 90.3 | 3.1 | 5.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | |
| **Sat** | 1305 | 55 | 88 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1451 |
| (%) | 89.9 | 3.8 | 6.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 1061 | 63 | 58 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 1189 |
| (%) | 89.2 | 5.3 | 4.9 | 0.1 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 1286 | 43 | 85 | 4 | 0 | 2 | 2 | 0 | 5 | 1 | 0 | 0 | 1426 |
| (%) | 90.1 | 3.0 | 5.9 | 0.3 | 0.0 | 0.1 | 0.2 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 1337 | 34 | 91 | 5 | 0 | 2 | 2 | 0 | 7 | 1 | 0 | 0 | 1479 |
| (%) | 90.4 | 2.3 | 6.1 | 0.3 | 0.0 | 0.1 | 0.2 | 0.0 | 0.5 | 0.1 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 1183 | 59 | 73 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1320 |
| (%) | 89.6 | 4.5 | 5.5 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-42**
**Site:** Tully Falls Rd.0.1EW
**Description:** **Ch 195 @ Intersection Kennedy Highway <60>**
**Filter time:** **14:37 Monday, 26 February 2018 => 7:55 Tuesday, 6 March 2018**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 5 March 2018**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 1470 | 27 | 88 | 11 | 2 | 1 | 2 | 0 | 10 | 0 | 0 | 0 | 1611 |
| (%) | 91.2 | 1.7 | 5.5 | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | |
| **Tue*** | 187 | 3 | 13 | 4 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 210 |
| (%) | 89.0 | 1.4 | 6.2 | 1.9 | 0.0 | 0.5 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

**Entire week**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1470 | 27 | 88 | 11 | 2 | 1 | 2 | 0 | 10 | 0 | 0 | 0 | 1611 |
| (%) | 91.2 | 1.7 | 5.5 | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | |

**Weekdays**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1470 | 27 | 88 | 11 | 2 | 1 | 2 | 0 | 10 | 0 | 0 | 0 | 1611 |
| (%) | 91.2 | 1.7 | 5.5 | 0.7 | 0.1 | 0.1 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | |

**Weekend** No complete days.

*** - Incomplete**

# MetroCount Traffic Executive
# Daily Classes

**DailyClass-39 -- English (ENA)**

**Datasets:**

| | |
|---|---|
| **Site:** | **[Wooroora Rd 1] Ch 430@ Intersection Tully Falls Rd & Wooroora Rd <60 >** |
| **Attribute:** | Ravenshoe |
| **Direction:** | 5 - South bound A>B, North bound B>A. **Lane:** 0 |
| **Survey Duration:** | 11:04 Thursday, 28 June 2012 => 8:35 Wednesday, 11 July 2012, |
| **Zone:** | |
| **File:** | Wooroora Rd 111Jul2012.EC0 (Plus ) |
| **Identifier:** | Q2205BNJ MC56-L4 [MC55] (c)Microcom 19Sep03 |
| **Algorithm:** | Factory default axle (v5.02) |
| **Data type:** | Axle sensors - Paired (Class/Speed/Count) |

**Profile:**

| | |
|---|---|
| **Filter time:** | **11:05 Thursday, 28 June 2012 => 8:35 Wednesday, 11 July 2012 (12.8962)** |
| **Included classes:** | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| **Speed range:** | 10 - 160 km/h. |
| **Direction:** | North, East, South, West (bound), P = North, Lane = 0-16 |
| **Separation:** | Headway > 0 sec, Span 0 - 100 metre |
| **Name:** | Default Profile |
| **Scheme:** | Vehicle classification (AustRoads94) |
| **Units:** | Metric (metre, kilometre, m/s, km/h, kg, tonne) |
| **In profile:** | Vehicles = 8560 / 8566 (99.93%) |

# Daily Classes

**DailyClass-39**
**Site:** Wooroora Rd 1.0.1SN
**Description:** **Ch 430@ Intersection Tully Falls Rd & Wooroora Rd <60 >**
**Filter time:** **11:05 Thursday, 28 June 2012 => 8:35 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 25 June 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 386 | 17 | 20 | 2 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 431 |
| (%) | 89.6 | 3.9 | 4.6 | 0.5 | 0.0 | 0.9 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | |
| **Fri** | 638 | 21 | 50 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 714 |
| (%) | 89.4 | 2.9 | 7.0 | 0.3 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat** | 547 | 21 | 30 | 6 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 610 |
| (%) | 89.7 | 3.4 | 4.9 | 1.0 | 0.3 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 514 | 33 | 32 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 585 |
| (%) | 87.9 | 5.6 | 5.5 | 0.3 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 566 | 25 | 37 | 3 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 636 |
| (%) | 89.0 | 3.9 | 5.9 | 0.5 | 0.1 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 638 | 21 | 50 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 714 |
| (%) | 89.4 | 2.9 | 7.0 | 0.3 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 531 | 27 | 31 | 4 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 598 |
| (%) | 88.8 | 4.5 | 5.2 | 0.7 | 0.2 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-39**
**Site:** Wooroora Rd 1.0.1SN
**Description:** **Ch 430@ Intersection Tully Falls Rd & Wooroora Rd <60 >**
**Filter time:** **11:05 Thursday, 28 June 2012 => 8:35 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 2 July 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 622 | 17 | 58 | 2 | 0 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 707 |
| (%) | 88.0 | 2.4 | 8.2 | 0.3 | 0.0 | 0.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 669 | 16 | 39 | 13 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 741 |
| (%) | 90.3 | 2.2 | 5.3 | 1.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Wed** | 612 | 16 | 44 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 679 |
| (%) | 90.1 | 2.4 | 6.5 | 0.7 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu** | 656 | 24 | 27 | 5 | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 720 |
| (%) | 91.1 | 3.3 | 3.8 | 0.7 | 0.0 | 0.3 | 0.3 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | |
| **Fri** | 667 | 23 | 25 | 4 | 0 | 5 | 1 | 0 | 2 | 0 | 0 | 0 | 727 |
| (%) | 91.7 | 3.2 | 3.4 | 0.6 | 0.0 | 0.7 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | |
| **Sat** | 547 | 20 | 42 | 9 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 622 |
| (%) | 87.9 | 3.2 | 6.8 | 1.4 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 545 | 40 | 25 | 5 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 618 |
| (%) | 88.2 | 6.5 | 4.0 | 0.8 | 0.0 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 617 | 22 | 37 | 6 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 688 |
| (%) | 89.7 | 3.2 | 5.4 | 0.9 | 0.0 | 0.4 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 645 | 19 | 39 | 6 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 715 |
| (%) | 90.3 | 2.7 | 5.4 | 0.8 | 0.0 | 0.4 | 0.2 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 546 | 30 | 34 | 7 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 620 |
| (%) | 88.1 | 4.8 | 5.4 | 1.1 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-39**
**Site:** Wooroora Rd 1.0.1SN
**Description:** **Ch 430@ Intersection Tully Falls Rd & Wooroora Rd <60 >**
**Filter time:** **11:05 Thursday, 28 June 2012 => 8:35 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 9 July 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 640 | 33 | 56 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 734 |
| (%) | 87.2 | 4.5 | 7.6 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 496 | 21 | 31 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 550 |
| (%) | 90.2 | 3.8 | 5.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 99 | 1 | 17 | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 122 |
| (%) | 81.1 | 0.8 | 13.9 | 1.6 | 0.0 | 0.8 | 0.8 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 568 | 27 | 44 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 642 |
| (%) | 88.5 | 4.2 | 6.8 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 568 | 27 | 44 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 642 |
| (%) | 88.5 | 4.2 | 6.8 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | |

**Weekend** No complete days.

*** - Incomplete**

# MetroCount Traffic Executive
# Daily Classes

**DailyClass-40 -- English (ENA)**

**Datasets:**

| | |
|---|---|
| **Site:** | **[Wooroora Rd 2] Ch 10000 @ Intersection Kennedy Hwy & Wooroora Rd <80 >** |
| **Attribute:** | Ravenshoe |
| **Direction:** | 5 - South bound A>B, North bound B>A. **Lane:** 0 |
| **Survey Duration:** | 11:39 Thursday, 28 June 2012 => 8:52 Wednesday, 11 July 2012, |
| **Zone:** | |
| **File:** | Wooroora Rd 211Jul2012.EC0 (Plus ) |
| **Identifier:** | CS916NHM MC56-L5 [MC55] (c)Microcom 19Oct04 |
| **Algorithm:** | Factory default axle (v5.02) |
| **Data type:** | Axle sensors - Paired (Class/Speed/Count) |

**Profile:**

| | |
|---|---|
| **Filter time:** | **11:39 Thursday, 28 June 2012 => 8:52 Wednesday, 11 July 2012 (12.8842)** |
| **Included classes:** | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 |
| **Speed range:** | 10 - 160 km/h. |
| **Direction:** | North, East, South, West (bound), P = North, Lane = 0-16 |
| **Separation:** | Headway > 0 sec, Span 0 - 100 metre |
| **Name:** | Default Profile |
| **Scheme:** | Vehicle classification (AustRoads94) |
| **Units:** | Metric (metre, kilometre, m/s, km/h, kg, tonne) |
| **In profile:** | Vehicles = 1447 / 1452 (99.66%) |

# Daily Classes

**DailyClass-40**
**Site:** Wooroora Rd 2.0.1SN
**Description:** **Ch 10000 @ Intersection Kennedy Hwy & Wooroora Rd <80 >**
**Filter time:** **11:39 Thursday, 28 June 2012 => 8:52 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 25 June 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 67 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 74 |
| (%) | 90.5 | 1.4 | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | |
| **Fri** | 98 | 7 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 115 |
| (%) | 85.2 | 6.1 | 5.2 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat** | 81 | 11 | 9 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 104 |
| (%) | 77.9 | 10.6 | 8.7 | 1.9 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 84 | 2 | 11 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 99 |
| (%) | 84.8 | 2.0 | 11.1 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 88 | 7 | 9 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 106 |
| (%) | 82.7 | 6.3 | 8.2 | 0.6 | 0.0 | 0.0 | 1.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 98 | 7 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 115 |
| (%) | 85.2 | 6.1 | 5.2 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 83 | 7 | 10 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 102 |
| (%) | 81.3 | 6.4 | 9.9 | 1.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-40**
**Site:** Wooroora Rd 2.0.1SN
**Description:** **Ch 10000 @ Intersection Kennedy Hwy & Wooroora Rd <80 >**
**Filter time:** **11:39 Thursday, 28 June 2012 => 8:52 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 2 July 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 95 | 4 | 16 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 118 |
| (%) | 80.5 | 3.4 | 13.6 | 0.0 | 0.0 | 0.0 | 0.8 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 93 | 6 | 6 | 2 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 110 |
| (%) | 84.5 | 5.5 | 5.5 | 1.8 | 0.0 | 0.9 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Wed** | 97 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 103 |
| (%) | 94.2 | 1.9 | 2.9 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu** | 122 | 6 | 6 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 137 |
| (%) | 89.1 | 4.4 | 4.4 | 1.5 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri** | 103 | 2 | 7 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 115 |
| (%) | 89.6 | 1.7 | 6.1 | 1.7 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat** | 129 | 7 | 8 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 153 |
| (%) | 84.3 | 4.6 | 5.2 | 5.2 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun** | 93 | 12 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 115 |
| (%) | 80.9 | 10.4 | 6.1 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Entire week** | | | | | | | | | | | | | |
| | 105 | 6 | 8 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 122 |
| (%) | 86.0 | 4.6 | 6.2 | 2.0 | 0.0 | 0.4 | 0.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekdays** | | | | | | | | | | | | | |
| | 102 | 4 | 8 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 117 |
| (%) | 87.5 | 3.4 | 6.5 | 1.0 | 0.0 | 0.5 | 0.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Weekend** | | | | | | | | | | | | | |
| | 111 | 10 | 8 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 134 |
| (%) | 82.8 | 7.1 | 5.6 | 4.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

*** - Incomplete**

# Daily Classes

**DailyClass-40**
**Site:** Wooroora Rd 2.0.1SN
**Description:** **Ch 10000 @ Intersection Kennedy Hwy & Wooroora Rd <80 >**
**Filter time:** **11:39 Thursday, 28 June 2012 => 8:52 Wednesday, 11 July 2012**
**Scheme:** Vehicle classification (AustRoads94)
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

**Monday, 9 July 2012**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mon** | 72 | 3 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 |
| (%) | 82.8 | 3.4 | 9.2 | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Tue** | 78 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 |
| (%) | 85.7 | 6.6 | 7.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Wed*** | 19 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| (%) | 73.1 | 0.0 | 19.2 | 7.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Thu*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Fri*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sat*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| **Sun*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Average daily volume**

**Entire week**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 75 | 5 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| (%) | 84.3 | 5.1 | 8.4 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Weekdays**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 75 | 5 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| (%) | 84.3 | 5.1 | 8.4 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

**Weekend** No complete days.

*** - Incomplete**