Galilee Power Station Project

Material Change of Use Application
Transport Impact Assessment

Prepared by: GTA Consultants (QLD) Pty Ltd for Waratah Coal Pty Ltd

on 16/10/19

Reference: Q163320

Issue #: B

GTAconsultants

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Quality Record

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EXECUTIVE SUMMARY

Waratah Coal Proprietary Limited (Waratah Coal) a wholly owned subsidiary of Mineralogy Proprietary Limited, proposes to develop a 1,400 MW ultra-supercritical power station, known as the Galilee Power Project, adjacent to the Mining Lease for their Galilee Coal Project (GCP). The Project will be located adjacent to the GCP Mining Lease Application area (MLA70454) which is located approximately 30km north of the township of Alpha, within the Barcaldine Regional Council administrative area.

Assessment Scenario and Traffic Generation

Design horizons as outlined below form the basis of this Transport Impact Assessment (TIA). These design horizons have been determined with respect to the requirements set out in the Department of Transport and Main Roads' *Guide to Traffic Impact Assessment (GTIA)* and represent the critical design years when considering likely Project traffic generation associated with forecast workforce requirements (further detailed provided in Section 5.2).

- 2022 (Project Year 2): Peak construction phase of Project
- 2023 (Project Year 3): Opening year of operations of Project and peak combined Project workforce
- 2032 (Project Year 12): 10-year design horizon from operations commencement of Project
- 2042 (Project Year 22): 20-year design horizon from operations commencement of Project

It should be noted that the 10-year and 20-year design horizon is only relevant to access intersection assessment and pavement impact assessment, respectively, as outlined in the GTIA.

The assessment has been made on a 'worst case' basis for the option of sizing and technology that has the greatest anticipated impact on the road network (i.e. 1,400 MW ultra-supercritical).

The Galilee Power Project will be the first thermal power plant in Australia to employ flue gas desulphurisation (FGD). This process is being deployed in order to make the Galilee Power Project the cleanest coal fired power project in Australia measured by any metric. There are three technologies being considered for flue gas desulphurisation, each with a different impact on operational vehicle movements, these technologies are:

- Option 1: Conventional wet limestone slurry,
- Option 2: Dry limestone injection,
- Option 3: Catalytic wet acid process.

Options 1 and 2 require delivery of limestone to the site. Option 3 does not require delivery of limestone to the site. Limestone will be sourced from the Rockhampton or Gladstone region. Option 3 produces salable sulphuric acid. For the purposes of this study it is assumed that sulphuric acid will be trucked in an ISO-tainer by flat bed semi-trailer to Alpha where the ISO-tainer will be loaded onto rail for transportation to its final destination (likely to be QNI north of Townsville).

It is anticipated that the workforce is to be a combination of DIDO and FIFO during the construction phase and only DIDO during the operations phase. Project workforce is assumed to access the site from nearby townships of Jericho and Alpha with construction FIFO workforce assumed to do so from Alpha Airport. These assumptions are understood to be the best Project estimate based on discussion with the Proponent.

Estimates of the workforce generated traffic based on the latest and best estimate of workforce numbers for the Project are detailed in Table 1.1. Traffic associated with operation of the GCP mine is included in the various cumulative impacts identified in Section 4.

Table 1.1: Workforce Traffic Generation Summary

Design Year	AM Peak (veh / hr)		PM Peak (veh / hr)	
	In	Out	In	Out
2022	218	0	0	218
2023	246	0	0	246
2032	120	0	0	120

veh /hr – vehicle movements per hour

The estimated projection of daily heavy vehicle movements based on the latest and best estimates are shown in Table 1.2.

Table 1.2: Daily Project Heavy Vehicle Movements

Project Phase	Vehicle Type	Origin/ Destination					
		Alpha	Gladstone	Mackay	Brisbane	Northern Territory	Southern States
Construction (2021 – 2023)	Rigid	48 [1]	2	2 [2]	2 [2]	2 [2]	2 [2]
	Semi-Trailer	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	B-Double	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	Oversized	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	Sub-Total	**44**	**20**	**8** [2]	**8** [2]	**8** [2]	**8** [2]
Operations (2023 – 2076)	Rigid	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Semi-Trailer	2	8	2 [2]	2 [2]	2 [2]	2 [2]
	B-Double	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Oversized	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Sub-Total	**8**	**14**	**8** [2]	**8** [2]	**8** [2]	**8** [2]
Option 1 FGD [4] (2023 – 2076)	Road Train (Type 1)	-	12 [3]	-	-	-	-
	Semi-Trailer	-	16 [3]	-	-	-	-
Option 2 FGD [4] (2023 – 2076)	Road Train (Type 1)	-	22 [3]	-	-	-	-
	Semi-Trailer	-	28 [3]	-	-	-	-
Option 3 FGD (2023 – 2076)	Semi-Trailer	26	-	-	-	-	-

[1] 10 of the 48 vehicle movements from Alpha are expected to originate from and be destined for Emerald.
[2] These movements are expected to be occasional on an as required basis.
[3] Haulage from limestone quary to Gracemere as a single semi-trailer and then coupled as a Type 1 Road Train from Gracemere to the Project site.
[4] Limestone is likely to be sourced from a quarry in Gladstone or Rockhampton. To maintain a conservative assessment, it has been assumed that the quarry will be located in Gladstone, though it is proposed that the pavement impact assessment be re-evaluated (if necessary) after the relevant technology and limestone sourcing contracts are confirmed.

As shown in Table 1.2, the majority of the heavy vehicle movements for the Project are expected to access the site from Gladstone and Alpha. Heavy vehicle traffic from Mackay, Brisbane and interstate has been excluded for the purpose of this assessment, given low and infrequent traffic volumes expected from these locations. The assumed haul route for heavy vehicle movements to/ from Gladstone and Alpha is via the Capricorn Highway.

Road Link Assessment

A road link assessment has been undertaken to assess the anticipated worst-case Project impacts on the proposed haul route (i.e. inclusive of the worst case traffic volumes associated with FGD Option 2). The impact of forecast Project traffic exceeds 5% of AADT for those road segments of the Capricorn Highway are presented in Table 1.3.

Table 1.3: Project Traffic Impacted Road Links – Including FGD Option 2

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	% Increase in AADT	
					2022	2023
181 - GLADSTONE - MT LARCOM ROAD	12.292	32.14	21.87	G	4%	9%
	12.292	32.14	30.29	A	4%	9%
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	24.28	G	2%	5%
	0	11.445	27.85	A	2%	5%
	11.445	45.42	26.32	G	2%	6%
	11.445	45.42	24.77	A	3%	6%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	5.69	5.97	37.15	A	2%	7%
	5.97	9.39	37.15	A	2%	5%
	9.39	10	37.15	A	2%	5%
	10	13.367	37.15	A	2%	5%
	13.367	17.856	24.67	A	3%	6%
	13.367	17.856	26.31	G	3%	6%
	17.856	51.62	27.53	G	3%	7%
	17.856	51.62	27.31	A	3%	7%
	51.62	73.35	30.43	G	4%	9%
	51.62	73.35	28.79	A	4%	8%
	73.35	106.38	28.79	A	4%	8%
	73.35	106.38	30.43	G	4%	9%
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	28.23	A	4%	9%
	0	36.04	25.65	G	4%	9%
	36.04	82.671	28.59	A	4%	8%
	36.04	82.671	21.14	G	4%	9%
	82.671	86.15	23.21	G	3%	7%
	82.671	86.15	22.88	A	3%	6%
	86.15	90.56	20.87	G	4%	10%
	86.15	90.56	20.95	A	4%	10%
	90.56	127.95	21.78	A	4%	11%
	90.56	127.95	23.13	G	4%	11%
	127.95	157.46	16.07	A	4%	9%
	127.95	157.46	15.24	G	4%	9%
	157.46	157.56	16.07	A	4%	9%
	157.46	157.56	15.24	G	4%	9%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	0	1.08	20.45	A	7%	6%
	0	1.08	19.64	G	7%	7%
	1.08	2.17	20.43	G	18%	16%
	1.08	2.17	18.41	A	18%	17%

	2.17	43.3	19.8	G	36%	34%
	2.17	43.3	22.56	A	36%	33%
	43.3	70.531	24.85	G	84%	78%
	43.3	70.531	46.63	A	85%	79%
	70.531	107.95	23.15	A	106%	98%
	70.531	107.95	28.98	G	87%	81%
	107.95	167.94	33.24	G	91%	84%
	107.95	167.94	26.08	A	89%	82%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	22.63	A	301%	388%
	0	54.27	47.31	G	308%	398%

All impacted links are expected to be contained within the theoretical capacity with the Project generated traffic.

Intersection Assessment And Upgrade

The Project proposes to gain vehicular access to the site via Saltbush Road to provide a more direct access route to the mine from the major road network being the Capricorn Highway. In order to facilitate this access, the Project proposes to upgrade the existing Capricorn Highway / Saltbush Road intersection. A turn warrant assessment of this intersection has been undertaken in accordance with the methodology provided in the Department of Transport and Main Roads' *Road Planning and Design Manual (RPDM) Volume 3: Part 4A*. Results of the assessment (included at Appendix C) conclude that turn treatments at the intersection should take the form of:

- Left-Turn: Basic Left Turn (BAL)
- Right-Turn: Short Channelised Right Turn (CHR[s]).

It should be noted that these turn treatments are acceptable out to the 2032 design horizon and are required prior to construction commencement of the Project in 2021.

Saltbush Road Upgrade

The Proponent proposes to upgrade Saltbush Road between the Capricorn Highway and the site access location. The upgrade will bring the road to a two lane sealed road suitable for the classes of heavy vehicles required to construct and operate the power plant and mine. The upgrade will include appropriate design allowances for expected over-mass vehicles and bend geometry will allow for expected road train and oversized vehicle access. Driveways will be assessed for appropriate line of site geometry and driveway to road intersections will be upgraded as necessary and as agreed with landholders.

Pavement Impact Assessment

Identification of pavement impacts to SCRs was undertaken in-line TMR's GTIA guidelines and the associated Pavement Impact Assessment Practice Note for the Capricorn Highway between Jericho and Rockhampton, the Bruce Highway between Benaraby and Rockhampton, and Gladstone – Mount Larcome Road. Background AADT volumes and Standard Axle Repetitions (SAR) were based on data provided by TMR in a marginal cost spreadsheet, and Project generated traffic SARs were calculated based on anticipated heavy vehicle movements for the Project. Anticipated pavement loadings of adjacent Galilee Coal Mine Project were also added to the background generated SAR's (refer to Section 4) to undertake a cumulative pavement impact assessment.

Per the TMR assessment guidelines, the pavement impact identification was undertaken based on SAR4 loading, with monetary contributions then determined based on the pavement type dependent loading corresponding to SAR4, SAR5 or SAR12.

Impact identification and resultant monetary contributions which would be required to offset pavement impacts, have been determined for the following scenarios:

- Scenario 1: Project with No FGD (for comparative purposes)
- Scenario 2: Project with Option 1 FGD, which includes heavy vehicle movements for Limestone delivery via Gladstone
- Scenario 3: Project with Option 2 FGD, which includes heavy vehicle movements for Limestone delivery via Gladstone
- Scenario 4: Project with Option 3 FGD, which includes heavy vehicle movements for acid removal to Alpha.

Pavement Impacts (i.e. SAR impacts) of greater than 5% have been identified for the road links along the Capricorn Highway, as presented in Table 8.2, Table 8.3, Table 8.4 and Table 8.5, for the design years of 2022 and 2023.

As per the Pavement Impact Assessment (PIA) methology, contributions have been assessed based on the costing pavement type and marginal cost provided by TMR. The monetary contributions have been calculated based on the corresponding SAR4, SAR5, and SAR12 impacts consistent with the PIA methodology for a period up to 20 years following the opening of the final stage.

Table 1.4: Pavement Impact Assessment Monetary Contributions

Phase	Scenario 1: No FGD	Scenario 2: FGD Option 1	Scenario 3: FGD Option 2	Scenario 4: FGD Option 3
Construction (2021 – 2022)	$190,752	$190,752	$190,752	$190,752
Construction + Operations Overlap (2023)	$187,637	$292,278	$316,279	$192,171
Operations (2024 – 2042)	$1,137,590	$2,343,854	$3,387,578	$1,390,971
Combined Total (i.e. life of project)	$1,515,979	$2,796,983	$3,894,609	$1,773,893

The pavement impact contribution identified for the Project varies between $1,515,979 and $3,894,609, depending on the technology selected. A summary of pavement contributionm by road section (per scenario) is provided in Appendix F.

The Proponent has proposed that the pavement impact contribution be confirmed after the relevant technology and limestone sourcing contract (if necessary) have been finalised. The recalculation of the pavement contribution (if required) and subsequent pavement contribution payment to TMR is proposed to occur prior to the commencement of any construction and heavy vehicle haul operations.

Road Safety Risk Assessment

All identified potential risks as a result of the Project are expected to be within a medium level, with relevant mitigation measures detailed in the Road-Use Management Plan (RMP). Furthermore, analysis of historical crash data proximate to the Project, suggests that no atypical safety risks or hazards are present on the Capricorn Highway, which would need to be factored into the design of the Capricorn Highway/ Saltbush Road intersection.

Additional Impact Considerations

The Project is likely to utilise oversized vehicles for some of the transport activities as part of construction and operations. The use of these vehicles will be undertaken in accordance with the National Heavy Vehicle Regulator guidelines and be subject to permit applications and TMR approvals for the use of such vehicles. The use of these vehicles will be assessed as part of these permit applications.

Preliminary liaison with Queensland Rail (QR) indicates that the requirement to undertake an Australian Level Crossing Assessment Model (ALCAM) assessment for impacts to rail level crossings will be determined following lodgement of the planning application.

The preparation of a RMP will be required as the Project progresses. Based on the TIA findings, potential strategies to be considered as part of the RMP to offset road impacts include:

- Adjusting shift times and heavy vehicle movement scheduling such that Project traffic peaks do not coincide with the network peak periods
- Policies focussing on driver behaviour and fatigue management.

CONTENTS

1. INTRODUCTION

01

1.1. Background

Waratah Coal Proprietary Limited (Waratah Coal), a wholly owned subsidiary of Mineralogy Proprietary Limited, proposes to develop a 1,400MW ultra-supercritical power station, known as the Galilee Power Project, adjacent to the Mining Lease for their Galilee Coal Project (GCP).

The Project is located approximately 30 km to the north of Alpha in Queensland, Australia.

The Project will provide the power needs for the GCP mine operations and provide low cost, reliable power to the National Electricity Market.

1.2. Purpose of this Report

This report sets out the assessment of the expected transport implications resulting from the construction, operation and decommissioning/ rehabilitation phases of the Project. Specifically, this report considers the following:

1. The existing traffic conditions proximate to the Project, including an assessment of the haul roads anticipated to service the Project (base case).
2. Consideration of cumulative traffic impacts from adjacent large-scale developments.
3. The traffic generating characteristics of the Project.
4. The anticipated transport impact of the Project on the surrounding Local and State Controlled Road (SCR) network.
5. Proposed changes to road-related infrastructure required by the Project. This includes modifications to roads and access works and realignments of rail lines in the context of rail level crossings and services.
6. Expected traffic volumes of heavy vehicle haul movement associated with transport of materials, wastes and other goods for construction and operational phases of the Project.
7. Workforce journey-to-work (JTW) traffic generated by all Project activities, including anticipated traffic modes, volumes, composition, timing and routes.
8. Identification of methods and strategies to reduce any identified traffic impacts.

1.3. Study Methodology

This Transport Impact Assessment (TIA) has been undertaken in accordance with the requirements of the Department of Transport and Main Roads' *Guide to Traffic Impact Assessment (GTIA)*, by way of the adoption of the following methodology:

- Review existing road conditions and operations and establish a baseline condition (i.e. transport operation without the Project).
- Review publicly available information and documents to source traffic generation metrics of adjacent large-scale developments.
- Prepare estimates of Project generated traffic based on the intended haul routes of heavy vehicles and workforce requirements.
- Prepare scenarios for the traffic assessment which consider baseline and Project traffic generation estimates at critical Project milestones (referred herein as design horizons).
- Determine anticipated road impacts of the Project for each of the identified design horizons, in accordance with threshold levels and rationale provided within GTIA. Specifically, the following impacts have been considered:
    - Impact of the proposed vehicular access intersection on the existing road network provided as part of the Project.

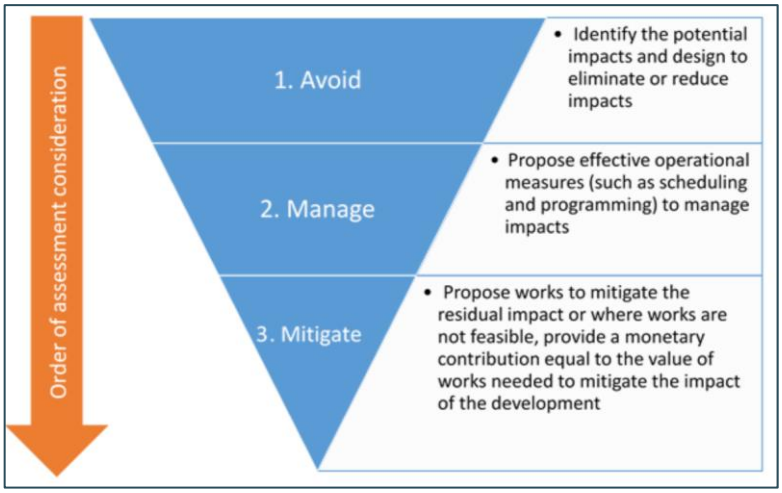
- Impact of Project related traffic on existing road link capacity for key haul routes.
- Impact of Project related heavy vehicle movements on existing pavement conditions.

- Where impacts were identified as exceeding GTIA defined threshold levels, recommendations to "avoid", "manage" or "mitigate" these impacts have been provided in line with the methodology detailed in GTIA and shown in Figure 1.1.
- Review and assess road safety risks that might arise as a result of the Project and identify mitigation measures to ensure no worsening of these risks.

It should be highlighted that the application of this methodology also addresses the following requirements of Council's planning scheme:

- Has an appropriately designed access to the road network and traffic generated by the development does not impact adversely on the local road network.
- Sufficient information should be provided to enable Council to accurately assess traffic related matters. The following information should be provided:
  - traffic likely to be generated by the proposal;
  - the number, type and frequency of vehicles likely to service the proposal;
  - the times and arrangements for servicing of the premises;
  - anticipated carparking requirements; and
  - the extent of car parking, vehicle manoeuvring areas, crossover / access details, loading / unloading areas, service areas.

Figure 1.1: Impact Mitigation Hierarchy



Source: Guide to Traffic Impact Assessment, Department of Transport and Main Roads (September 2017)

1.4. Reference Documents & Supporting Data

This report has been prepared with consideration of the following reference resources and documents:

- Draft Waratah Coal, Galilee Power Station, Initial Advice Statement (dated 31 August 2018)
- TMR (2017) *Guide to Traffic Impact Assessment (GTIA)*
- TMR (2006) *Road Planning and Design Manual (Edition 2) – Volume 3 (RPDM)*

- TMR (2014) *Road Planning and Design Manual (2nd Edition) – Volume 3: Supplement to Austroads Guide to Road Design Part 4A (RPDM Volume 3: Part 4A)*
- Austroads (2012) *Guide to Pavement Technology, Part 2: Pavement Structural Design (Austroads GPT: Part 2)*
- Austroads (2009) *Guide to Traffic Management Part 3: Traffic Studies and Analysis (Austroads GTM: Part 3)*
- Austroads (2010) *Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (Austroads GRD: Part 4A)*
- Marginal Costs Spreadsheet, provided by TMR in September 2019
- Other background data and Project input assumptions as agreed with the Proponent.

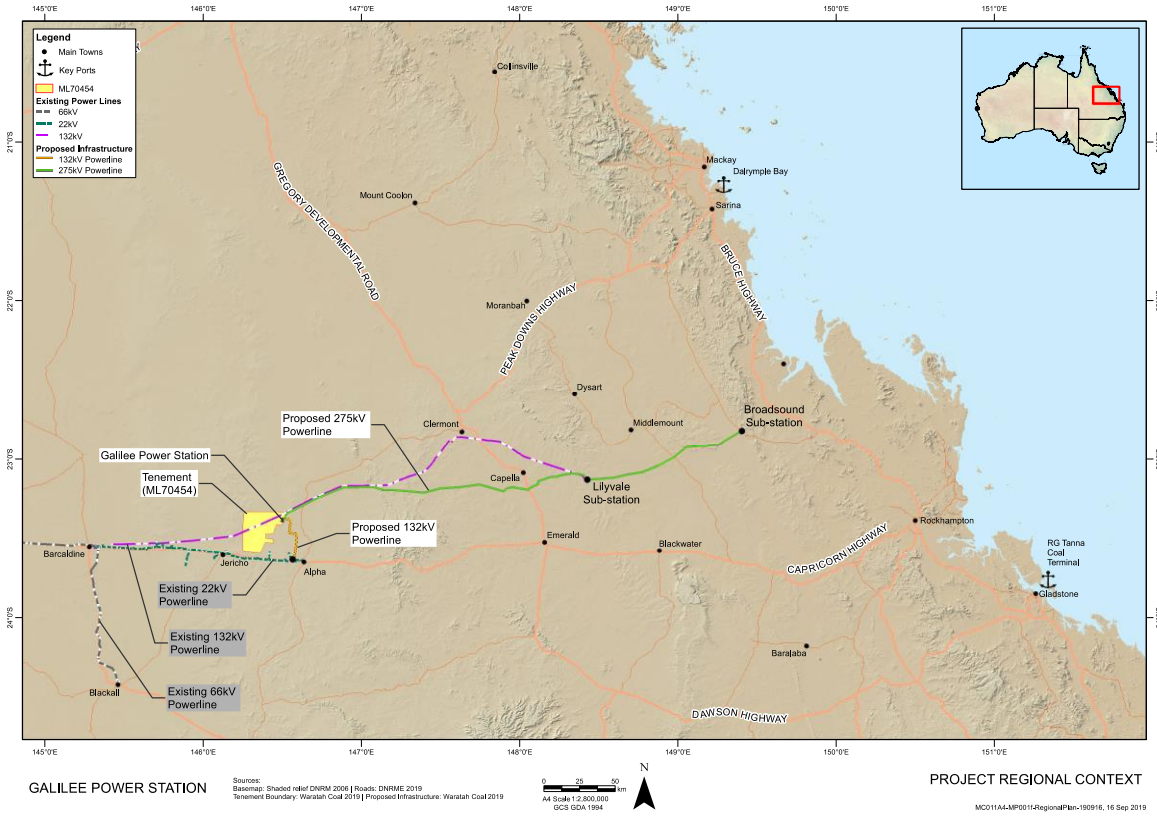
2. PROJECT DESCRIPTION

02

2.1. Project Location

The Project will be located adjacent to the GCP Mining Lease Application Area (MLA70454) which is located approximately 30km west / north-west of the township of Alpha, within the Barcaldine Regional Council administrative area. Current access to the Mining Lease is via Monklands Road, which runs north off the Capricorn Highway at an intersection about midway between the towns of Alpha and Jericho. Figure 2.1 shows the GCP's location in the regional context.

Figure 2.1: Project Location



Source: Galilee Power Station Advice Statement, provided September 2019

2.2. Project Schedule

Construction of the Project is planned to commence in 2021 with a construction period of three years for the first unit, with the second unit being constructed six months later. The commissioning and operations of the power station would be ready to provide power to the GCP in December 2023. This timing and scheduling would allow for the GCP to deliver the first coal to RG Tanna Coal Terminal during the first quarter of 2024.

The Project has an operational cycle of 30 years followed by decommissioning and rehabilitation. Rehabilitation of the ash containment facility would be undertaken progressively during the operation of the power station.

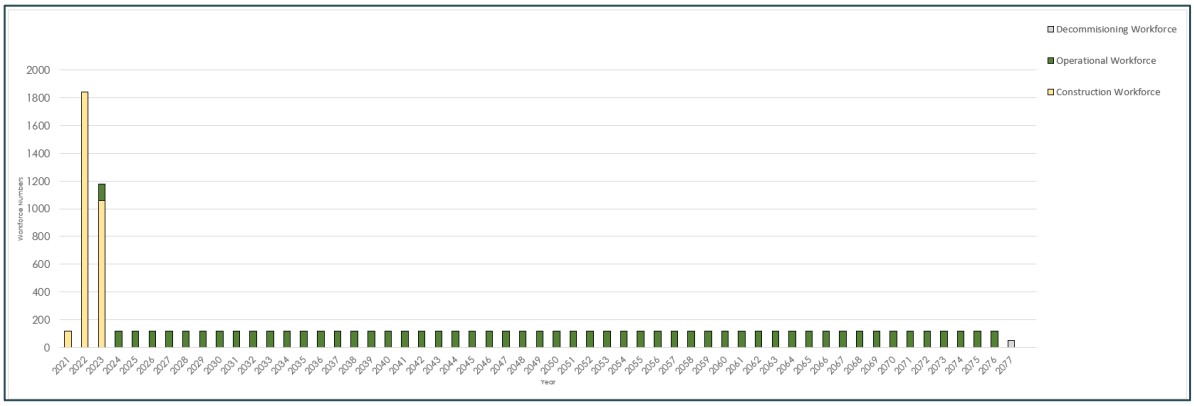
2.3. Workforce Projections

The Project's workforce will be a combination of Fly-in/Fly-out (FIFO) workers and people residing in local areas (e.g. existing residents and/or new residents that choose to reside locally as a result of the Project's approval). Local residents are assumed to reside in nearby townships of Alpha and Jericho, with FIFO workers assumed to fly in and out of Alpha Airport and residing in camps in Alpha. It is assumed that Alpha Airport will be upgraded as a part of this Project to cater for

the proposed FIFO arrangement. All FIFO workers are assumed to access the Project from camps in Alpha via bus. A proportion of workers residing in Alpha are also assumed to access the Project via GCP-operated bus, with the remaining workforce expected to use private vehicles. These assumptions are the best Project estimates to date based on discussions with the Proponent and apply to all phases of the Project, including construction, operations and decommissioning personnel.

Indicative workforce projections (based on best knowledge of the Project to date) which have formed the basis of the assessment are provided in Figure 2.2.

Figure 2.2: Indicative Workforce Projections



Source: Information provided by Arche Energy, dated 27 November 2018

2.4. Proposed Access & Parking Arrangements

The Project proposes to gain access via Saltbush Road. As such, upgrades to Saltbush Road and its intersection with Capricorn Highway will be undertaken to cater for Project generated traffic as part of this Project.

It is also expected that suitable and sufficient car parking for private vehicles will be provided on-site for workforce and visitors, such that vehicles are not parked on local or state roads.

2.5. Haul Movement Routes

All materials, plant and equipment are intended to be delivered to the Project via road-based transport. It is expected that construction traffic will primarily involve a mix of rigid trucks, articulated vehicles (e.g. semi-trailer) and B-Doubles. Some oversize loads are also expected throughout the life of the Project on an as required basis. Project infrastructure and other freight is expected to be transferred to site from regional centres such as Brisbane, Gladstone and Mackay as well as the local townships of Alpha and Emerald, with majority of the freight movement originating from Gladstone and Alpha. A small proportion of freight traffic is also expected to access the Project from interstate locations on an occasional basis during the operational phase of the Project.

Heavy vehicle movements associated with the construction and operational phase have been based upon projections provided by the Proponent and relate to best knowledge of the Project to date. Heavy vehicle traffic flows and associated vehicle types are expected to vary over the Project period, reflecting the type of materials and equipment required at specific points in time. Indicative heavy vehicle projections (based on best knowledge of the Project to date) which have formed the basis of the assessment are provided in Table 2.1.

The assessment has been made on a 'worst case' basis for the option of sizing and technology that has the greatest anticipated impact on the road network (i.e. 1,400 MW ultra-supercritical).

The Galilee Power Project will be the first thermal power plant in Australia to employ flue gas desulphurisation (FGD). This process is being deployed in order to make the Galilee Power Project the cleanest coal fired power project in Australia

measured by any metric. There are three technologies being considered for flue gas desulphurisation, each with a different impact on operational vehicle movements, these technologies are:

- Option 1: Conventional wet limestone slurry,
- Option 2: Dry limestone injection,
- Option 3: Catalytic wet acid process.

Options 1 and 2 require delivery of limestone to the site. Option 3 does not require delivery of limestone to the site. Limestone will be sourced from the Rockhampton or Gladstone region. Option 3 produces salable sulphuric acid. For the purposes of this study it is assumed that sulphuric acid will be trucked in an ISO-tainer by flat bed semi-trailer to Alpha where the ISO-tainer will be loaded onto rail for transportation to its final destination (likely to be QNI north of Townsville).

As the three options have material differences on the pavement impact assessment, the assessment presented in Section 8 of this report includes a summary of the likely impacts and associated pavement contributions resulting from each option which is being considered for FGD. The Proponent has proposed that the pavement impact contribution be confirmed after the relevant technology and limestone sourcing contract (if necessary) have been finalised. The recalculation of the pavement contribution (if required) and subsequent pavement contribution payment to TMR is proposed to occur prior to the commencement of any construction and heavy vehicle haul operations.

Table 2.1: Daily Project Heavy Vehicle Movements

Project Phase	Vehicle Type	Origin / Destination					
		Alpha	Gladstone	Mackay	Brisbane	Northern Territory	Southern States
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	Oversized	2	6	2 [2]	2 [2]	2 [2]	2 [2]
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Option 1 FGD [4] (2023 – 2076)	**Road Train (Type 1)**	**-**	**12** [3]	**-**	**-**	**-**	**-**
	Semi-Trailer	**-**	**16** [3]	**-**	**-**	-	**-**
Option 2 FGD [4] (2023 – 2076)	**Road Train (Type 1)**	**-**	**22** [3]	**-**	**-**	**-**	**-**
	Semi-Trailer	**-**	**28** [3]	**-**	**-**	-	**-**
Option 3 FGD (2023 – 2076)	**Semi-Trailer**	**26**	**-**	**-**	**-**	**-**	**-**

[1] 10 of the 48 vehicle movements from Alpha are expected to originate from and be destined for Emerald.
[2] These movements are expected to be occasional on an as required basis.
[3] Haulage from limestone quary to Gracemere as a single semi-trailer and then coupled as a Type 1 Road Train from Gracemere to the Project site.
[4] Limestone is likely to be sourced from a quarry in Gladstone or Rockhampton. To maintain a conservative assessment, it has been assumed that the quarry will be located in Gladstone, though it is proposed that the pavement impact assessment be re-evaluated (if necessary) after the relevant technology and limestone sourcing contracts are confirmed.

As shown in Table 2.1, the majority of Project generated heavy vehicle traffic is expected to originate from and be destined for Alpha and Gladstone during the construction phase (~67% of total construction heavy vehicle traffic, excluding FGD options). Heavy vehicle movements from Gladstone and Alpha are expected to be frequent, whilst only occasional and low volumes of heavy vehicle movements are expected to be generated from other locations.

3. EXISTING CONDITIONS

03

3.1. Road Network

The Project seeks to gain access via Saltbush Road, which intersects with the Capricorn Highway. Project traffic is anticipated to be generally limited to Capricorn Highway between Jericho and Rockhampton (route of heavy vehicle movements from Gladstone), and Saltbush Road between Capricorn Highway/ Saltbush Road intersection and the proposed site access. Characteristics of Capricorn Highway and Saltbush Road proximate to the Project are described in Table 3.1.

Table 3.1: Capricorn Highway and Saltbush Road Characteristics (Proximate to the Project Site)

Characteristic	Capricorn Highway	Saltbush Road
Direction	East – West	North – South
Jurisdiction	TMR	Barcaldine Regional Council
Cross-Section	Two-Lane / Two-way / Undivided	Two-way / undivided
Pavement	Sealed	Unsealed
AADT	~325	_ [1]
Posted Speed Limit	110 km/hr	Unposted

[1] Data not available

The typical cross-section of Capricorn Highway and Saltbush Road proximate to the site is presented in Figure 3.1 – Figure 3.4.

Figure 3.1: Capricorn Highway (Facing East)

Figure 3.2: Capricorn Highway (Facing West)

Figure 3.3: Saltbush Road (Facing North)

Figure 3.4: Saltbush Road (Facing South)

3.2. Future Upgrades

Consultation with TMR and a review of TMR's *Queensland Transport and Roads Investment Program 2019-20 to 2022-23 (QTRIP)* has been undertaken with regards to known future planning for the Capricorn Highway between Jericho and Rockhampton, Bruce Highway between Rockhampton and Bernaraby, and along Gladstone-Mount Larcom Road. For these state controlled road sections, works identified in QTRIP are presented in Table 3.2.

Table 3.2: QTRIP Works Schedule

Project Location	Location Description	Works Description
Capricorn Highway (Rockhampton - Duaringa)	Valentine Creek Bridge	Construct bridge/s
Capricorn Highway (Rockhampton - Duaringa)	Rockhampton – Gracemere	Duplicate from two to four lanes
Capricorn Highway (Duaringa – Emerald)	Codenwarra Road - Opal Street	Undertake transport project planning
Capricorn Highway (Duaringa - Emerald)	Sections: 14.65 - 140.39km	Rehabilitate pavement
Capricorn Highway (Rockhampton - Emerald)	Gracemere - Emerald	Construct overtaking lane/s
Capricorn Highway (Emerald - Alpha)	107.95 - 107.96km	Improve traffic signals
Bruce Highway (Benaraby – Rockhampton)	Various	Widen Pavement
Bruce Highway (Benaraby – Rockhampton)	Various	Construct overtaking lane/s
Bruce Highway (Benaraby – Rockhampton)	Six Mile Creek - South of Oaky Creek Road (86.60 - 90.72km)	Undertake transport project planning
Gladstone - Mount Larcom Road	Gibson Street - Wiggins Island Coal Export Terminal (2.30 - 7.50km)	Undertake transport project planning

As described in Table 3.2, several road upgrade projects are planned for the Capricorn Highway (16A, 16B, 16C, 16D), Bruce Highway (10E) and Gladstone-Mt Larcom Road (181). These works are planned to be undertaken prior to 2024. Upgrades identified in Table 3.2, are generally projects to improve road capacity, safety and intersection operations along

Capricorn Highway proximate to the site, and therefore, are expected to have a net benefit to the Project. Details regarding the extent of these upgrade works is not currently known. On this basis, the additional capacity likely to be available from the upgrades has not been considered in the RIA to allow for a worst-case (conservative) assessment.

3.3. Baseline Traffic Volumes & Growth

Background traffic volumes have been sourced from TMR, by way of 2018 Annual Average Daily Traffic (AADT) segment reports (obtained September 2019) for the Capricorn Highway (16A, 16B, 16C, 16D), Bruce Highway (10E) and Gladstone-Mt Larcom Road (181). A copy of these AADT reports is contained at Appendix A, with a summary of data provided in Table 3.3.

For the purpose of converting AADT volumes to peak hour volumes (for the road link and intersection assessment), a peak-to-daily ratio of 15% has been assumed. The application of this ratio is in accordance with guidance for rural roads provided in *RPDM 1st Edition – Chapter 5*.

A review of growth rates obtained from historic data detailed within the AADT segment reports indicates that the Capricorn Highway has experienced negative growth for various road sections over the past five to ten years. This could be attributable to a slowdown in mining sector projects occurring within the region. As such, a growth rate of 3% per annum (linear) has been adopted to inform the basis of future traffic forecasts, to reflect typical background traffic growth in the absence of major project development. This assumption is considered conservative and therefore appropriate for determining a worst-case scenario for the TIA.

Table 3.3: Baseline Traffic Volumes – Bruce Highway, Capricorn Highway & Mt Larcom Road (2018)

Roadname	Direction	Chainage Start	Chainage End	AADT	5 Year Growth	10 Year Growth	Heavy Vehicle Percentage
181 - GLADSTONE - MT LARCOM ROAD	G	0	1.409	3320	-9.87	-3.69	14.72
	A	0	1.409	3369	-9.01	-4.36	20.26
	G	1.409	2.277	3025	-6.46	-2.68	16.05
	A	1.409	2.277	3150	-5.02	-1.6	16.2
	G	2.277	3.2	3025	-6.46	-2.68	16.05
	A	2.277	3.2	3150	-5.02	-1.6	16.2
	A	3.2	3.258	3150	-5.02	-1.6	16.2
	G	3.2	3.258	3025	-6.46	-2.68	16.05
	G	3.258	3.37	4706	-3.56	-1.37	11.52
	A	3.258	3.37	4542	-4.41	-1.33	14.11
	A	3.37	3.756	4542	-4.41	-1.33	14.11
	G	3.37	3.756	4706	-3.56	-1.37	11.52
	A	3.756	3.892	4542	-4.41	-1.33	14.11
	G	3.756	3.892	4706	-3.56	-1.37	11.52
	G	3.892	4.625	4706	-3.56	-1.37	11.52
	A	3.892	4.625	4542	-4.41	-1.33	14.11
	A	4.625	7.063	3189	-2.95	-1.6	15.99
	G	4.625	7.063	3206	-2.39	-0.8	13.5
	A	7.063	9.325	3189	-2.95	-1.6	15.99

Roadname	Direction	Chainage Start	Chainage End	AADT	5 Year Growth	10 Year Growth	Heavy Vehicle Percentage
	G	7.063	9.325	3206	-2.39	-0.8	13.5
	G	9.325	12.292	3206	-2.39	-0.8	13.5
	A	9.325	12.292	3189	-2.95	-1.6	15.99
	G	12.292	32.14	1480	-5.98	-1.77	21.87
	A	12.292	32.14	1482	-6.55	-2.31	30.29
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	G	0	11.445	2681	0.79	0.33	24.28
	A	0	11.445	2776	1.98	0.9	27.85
	G	11.445	45.42	2483	0.73	2.35	26.32
	A	11.445	45.42	2373	0.31	2.05	24.77
	A	45.42	85.308	2842	-0.7	0.2	23.77
	G	45.42	85.308	2841	0.34	0.14	21.66
	G	85.308	108.938	3478	2.59	2.26	28.33
	A	85.308	108.938	3524	3.59	2.41	26.17
	A	108.938	114.088	3067	2.84	1.85	27.05
	G	108.938	114.088	3062	1.21	1.5	24.95
	G	114.088	114.388	3062	1.21	1.5	24.95
	A	114.088	114.388	3067	2.84	1.85	27.05
	A	114.388	116.961	4412	1.27	0.77	21.02
	G	114.388	116.961	4798	0.19	1.1	15.46
	A	116.961	119.737	10110	-1.73	-1.04	16.9
	G	116.961	119.737	10103	-2.67	-1.75	20.55
	G	119.737	121.051	10566	-3.06	-1.4	11.61
	A	119.737	121.051	10346	-3.84	-2.32	14.47
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	G	0	0.738	8289	-1.07	0.35	10.79
	A	0	0.738	7503	-2.33	-0.42	25.98
	A	0.738	5.495	7503	-2.33	-0.42	25.98
	G	0.738	5.495	8289	-1.07	0.35	10.79
	G	5.495	5.69	8289	-1.07	0.35	10.79
	A	5.495	5.69	7503	-2.33	-0.42	25.98
	A	5.69	5.97	2421	-0.59	-0.2	37.15
	G	5.69	5.97	2583	0.28	0.36	24.82
	G	5.97	9.39	2583	0.28	0.36	24.82
	A	5.97	9.39	2421	-0.59	-0.2	37.15
	A	9.39	10	2421	-0.59	-0.2	37.15
	G	9.39	10	2583	0.28	0.36	24.82
	G	10	13.367	2583	0.28	0.36	24.82

Roadname	Direction	Chainage Start	Chainage End	AADT	5 Year Growth	10 Year Growth	Heavy Vehicle Percentage
	A	10	13.367	2421	-0.59	-0.2	37.15
	A	13.367	17.856	1882	-3.95	-2.17	24.67
	G	13.367	17.856	2120	-0.7	-0.47	26.31
	G	17.856	51.62	1633	-2.34	-1.53	27.53
	A	17.856	51.62	1660	-0.05	-0.41	27.31
	G	51.62	73.35	1346	-3.75	-2.61	30.43
	A	51.62	73.35	1464	-0.51	-1.07	28.79
	A	73.35	106.38	1461	-0.36	0.09	28.79
	G	73.35	106.38	1378	-1.2	-1.07	30.43
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	A	0	36.04	1328	-1.39	-1.25	28.23
	G	0	36.04	1318	-1.95	-1.62	25.65
	A	36.04	82.671	1451	1.29	0.31	28.59
	G	36.04	82.671	1385	0.22	-0.43	21.14
	G	82.671	86.15	1852	2.12	1.36	23.21
	A	82.671	86.15	1897	1.37	1.38	22.88
	G	86.15	90.56	1206	-1.79	0.09	20.87
	A	86.15	90.56	1220	-1.8	0.27	20.95
	A	90.56	127.95	1079	-1.24	-1.12	21.78
	G	90.56	127.95	1076	-0.64	-0.99	23.13
	A	127.95	157.46	1414	-0.6	-1.34	16.07
	G	127.95	157.46	1415	-0.83	-1.53	15.24
	A	157.46	157.56	1414	-0.6	-1.34	16.07
	G	157.46	157.56	1415	-0.83	-1.53	15.24
	G	157.56	157.78	4903	0.66	8.09	17.47
	A	157.56	157.78	4834	1.98	8.29	15.35
	A	157.78	158.64	4834	1.98	8.29	15.35
	G	157.78	158.64	4903	0.66	8.09	17.47
	A	158.64	158.95	4834	1.98	8.29	15.35
	G	158.64	158.95	4903	0.66	8.09	17.47
	A	158.95	159.55	6921	4.42	11.37	9.84
	G	158.95	159.55	5850	3.48	9.78	15.95
16C -CAPRICORN HIGHWAY (EMERALD - ALPHA)	A	0	1.08	3454	2.13	8.17	20.45
	G	0	1.08	3243	0.37	7.45	19.64
	G	1.08	2.17	1298	1.07	3.22	20.43
	A	1.08	2.17	1254	-0.31	2.39	18.41
	G	2.17	43.3	599	-2.55	-1.33	19.8

Roadname	Direction	Chainage Start	Chainage End	AADT	5 Year Growth	10 Year Growth	Heavy Vehicle Percentage
	A	2.17	43.3	610	-2.25	-1.08	22.56
	G	43.3	70.531	230	-2.85	-2.07	24.85
	A	43.3	70.531	226	-3.36	-2.61	46.63
	A	70.531	107.95	171	-3.89	-2.67	23.15
	G	70.531	107.95	220	2.82	1.26	28.98
	G	107.95	167.94	208	2.18	0.58	33.24
	A	107.95	167.94	214	1.21	0.37	26.08
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	A	0	54.27	208	1.4	0.91	22.63
	G	0	54.27	200	1.61	0.79	47.31
	G	54.27	80.65	165	1.06	0.24	30.93
	A	54.27	80.65	173	2.15	0.43	24.49
	A	80.65	139.7	196	-0.58	0.25	36.02
	G	80.65	139.7	189	-1.58	-0.15	20.54
	G	139.7	140.49	189	-1.58	-0.15	20.54
	A	139.7	140.49	196	-0.58	0.25	36.02

3.4. Rail Network

The Project is located proximate to the Longreach – Brisbane rail line which caters for long distance passenger service and the Central West System (freight service). This line is a principal passenger and freight line within the Queensland Rail (QR) network, running between Brisbane and Winton with approximately four Longreach – Brisbane services scheduled per week.

3.5. Intersection & Network Performance

As shown in the Table 3.3, current traffic volumes on Capricorn Highway proximate to the Project are quite low which is consistent with on-site observations during GTA's site inspection (undertaken on 14 November 2018). As such, the current network and intersection performance on Capricorn Highway, proximate to the Project is expected to be within capacity.

3.6. Public Transport & Active Travel

There are no public or active transport provisions on Capricorn Highway proximate to the Project. This is assumed to be due to adjacent land uses mainly being mining/ resource sector developments which do not require access via public or active transport. As such, no impacts are expected to occur to existing public and active transport provisions proximate to the Project as a result of the Project.

4. CUMULATIVE TRAFFIC IMPACTS

04

4.1. Identified Project/s

A review of approved Coordinator General developments proximate to the Project was undertaken to determine key developments which may have cumulative impacts. Based on this review, it is expected that the approved GCP development, adjacent to the Project, would increase demands on the transport network and should therefore be included as background traffic in assessing the cumulative impacts.

4.2. Traffic Generation

A review of the GCP's traffic engineering report (dated 28/06/2013) indicates that the GCP is expected to generate approximately 680 vehicle movements per day during the operations phase which is expected to overlap with the construction and operations phase of the Project. As such, traffic volumes and pavement loading expected to be generated by the GCP mine construction and operation has been added to the background traffic volumes to form the baseline scenario for the road link and pavement impact assessment to incorporate cumulative traffic impacts. The summary of traffic and pavement loading expected to be generated by the GCP is presented in Table 4.1 and Table 4.2.

Table 4.1: Galilee Coal Project Traffic Generation Summary

Road	Section	2009 AADT (vpd)	GCP Generated Traffic (vpd)	
			Construction	Operation
Capricorn Hwy	new road to Jericho	400	220	135
Capricorn Hwy	new road to Alpha	390	243	122
Capricorn Hwy	east of Alpha	420	46	270
Clermont-Alpha Road	south of mine	80	0	0
Clermont-Alpha Road	north of mine	16	14	7
Monklands Road*	south of mine	15	0	0
New Mine Access Road	Between mine site and Capricorn Highway	NA	286	144

Reproduced from Galilee Coal Project, Traffic Engineering Report – EIS, dated 28/06/2013
vpd – vehicle per day

Table 4.2: Galilee Coal Project Pavement Loading Summary

Highway Section	New Road to Jericho	New Road to Alpha	East of Alpha	West of Anakie-Sapphire Rd	Anakie- Sapphire Rd to Emerald
Existing Annual ESA's	65,500	65,500	61,300	90,500	202,200
Heavy Vehicle AADT from Mine	11	71	60	33	27
Average ESA per heavy vehicle	2.0	2.0	2.5	2.5	2.5
Daily ESA's from Mine	22	142	150	82	67
Annual ESA's from Mine	8,030	51,830	54,750	29,930	24,455
Percentage increase from existing	12%	79%	89%	33%	12%

Reproduced from Galilee Coal Project, Traffic Engineering Report – EIS, dated 28/06/2013

5. PROJECT TRAFFIC

05

5.1. Design Horizons for Assessment

The design horizons as outlined below form the basis of this TIA. These design horizons have been determined with respect to the requirements set out in GTIA (refer to Table 5.1) and represent the critical design years when considering likely Project traffic generation associated with forecast workforce requirements (further detailed provided in Section 5.2).

- 2022 (Project Year 2): Peak construction phase of Project
- 2023 (Project Year 3): Opening year of operations of Project and peak combined Project workforce
- 2032 (Project Year 12): 10-year design horizon from operations commencement of Project
- 2042 (Project Year 22): 20-year design horizon from operations commencement of Project.

It should be noted that the 10-year and 20-year design horizon is only relevant to access intersection assessment and pavement impact assessment, respectively, as outlined in the GTIA and reproduced at Table 4.1.

Table 5.1: GTIA Specified Design Horizons for Assessment

Assessment / Impact Type	Assessment / Impact Year
Access and Frontage	Year of opening of each stage including the final stage and 10 years after the year of opening of the final stage for access intersections.
Road Link Capacity	Year of opening of each stage including the final stage
Pavement	Year of opening of each stage including the final stage. Note, that mitigation of pavement impacts occurs for a period of 20 years after the opening of the final stage.

(Sourced from GTIA)

5.2. Workforce Traffic Generation

Traffic generated by the Project workforce has been estimated based on the workforce projection outlined in Section 2.3. Assumptions have been made regarding the location of workforce, likely roster arrangements and vehicle occupancies, as detailed in the following sections. These assumptions have been developed in consultation with the Proponent and have been derived based on best knowledge of the Project to date. A summary of the anticipated workforce projections correlated to the design horizons are provided in Table 5.2.

Table 5.2: Total Workforce Numbers

Workforce Type	Estimated Number of Workforce		
	2022	2023	2032
Construction	1840	1060	0
Operations	0	120	120
Total	1840	1180	120

5.2.1. Location of Workforce

It is anticipated that the workforce is to be a combination of DIDO and FIFO during the construction phase and only DIDO during the operations phase. Project workforce is assumed to access the site from nearby townships of Jericho and Alpha

with construction FIFO workforce assumed to do so from Alpha Airport. A summary of expected workforce locations and associated directional distributions is provided in Table 5.3 with proportions of each mode of travel detailed in Table 5.4 and Table 5.5.

Table 5.3: Workforce Location Directional Distributions

Origin/ Destination of Workforce Movements	Proportion of Workforce	
	Construction	Operations
Alpha (east of site)	95%	100%
Jericho (west of site)	5%	0%
Total	**100%**	**100%**

Table 5.4: Proportion of Workforce Utilisation by Mode of Travel – Construction

Origin/ Destination of Workforce Movements	Mode of Travel	Proportion of Workforce Utilisation
Alpha (east of site)	Car	5%
	Bus [1] (for residents of Alpha)	10%
	Bus [1] (from Camps for FIFO)	80%
Jericho (west of site)	Car	5%
Total	**100%**	**100%**

[1] Buses are assumed to have a seating capacity of 50 people per bus.

Table 5.5: Proportion of Workforce Utilisation by Mode of Travel – Operations

Origin/ Destination of Workforce Movements	Mode of Travel	Proportion of Workforce Utilisation
Alpha (east of site)	Car	100%
	Bus [1] (for local residents)	0%
	Bus [1] (from Camps for FIFO)	0%
Total	**100%**	**100%**

[1] Buses are assumed to have a seating capacity of 50 people per bus.

5.2.2. Workforce Rosters

The Project is expected to operate on different workforce rosters for the construction and operations phase, as follows:

- Construction: 1 x 12-hour day shift.
- Operation: 3 x 8-hour shifts with operational hours being 24 hours, 7 days a week.

It is assumed that majority of the operations workforce will be rostered on during the day shift, with only 5 or less staff assigned on a 24-hour roster.

It is assumed that traffic generation associated with shift start and end times will occur within a single hour, coinciding with the network peak. All traffic is assumed to arrive in the AM peak and depart in the PM peak. It is noted that strategies may be provided as part of the recommendations of the Road-Use Management Plan (RMP) to stagger arrival / departures or to set shift times such that they do not coincide with the network peaks. The adoption of any such strategies would seek to alleviate the level of impact (if any) associated with the Project.

5.2.3. Summary of Workforce Traffic Generation

Based on the assumptions documented in the preceding sections, estimates of workforce generated traffic (inclusive of bus movements) are summarised in Table 5.6, with detailed breakdowns provided at Appendix B.

Table 5.6: Workforce Traffic Generation Summary

Design Year	AM Peak (veh / hr)		PM Peak (veh / hr)	
	In	Out	In	Out
2022	218	0	0	218
2023	246	0	0	246
2032	120	0	0	120

veh / hr – vehicle movements per hour

5.3. Heavy Vehicle Traffic Generation

The Proponent has provided estimates of heavy vehicle movements for the Project construction and operational phases. The anticipated origins/ destination of heavy vehicles are Gladstone and Alpha, with occasional heavy vehicle movements anticipated to/ from Mackay, Brisbane and interstate as required by the Project. A summary of anticipated daily two-way vehicle movements for the construction and operational phases of the Project is provided at Table 5.7.

Table 5.7: Daily Project Heavy Vehicle Movements

Project Phase	Vehicle Type	Origin / Destination					
		Alpha	Gladstone	Mackay	Brisbane	Northern Territory	Southern States
Construction (2021 – 2023)	Rigid	48 [1]	2	2 [2]	2 [2]	2 [2]	2 [2]
	Semi-Trailer	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	B-Double	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	Oversized	2	6	2 [2]	2 [2]	2 [2]	2 [2]
	Sub-Total	**44**	**20**	**8** [2]	**8** [2]	**8** [2]	**8** [2]
Operations (2023 – 2076)	Rigid	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Semi-Trailer	2	8	2 [2]	2 [2]	2 [2]	2 [2]
	B-Double	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Oversized	2	2	2 [2]	2 [2]	2 [2]	2 [2]
	Sub-Total	**8**	**14**	**8** [2]	**8** [2]	**8** [2]	**8** [2]
Option 1 FGD [4] (2023 – 2076)	**Road Train (Type 1)**	**-**	**12** [3]	**-**	**-**	**-**	**-**
	Semi-Trailer	**-**	**16** [3]	**-**	**-**	-	**-**
Option 2 FGD [4] (2023 – 2076)	**Road Train (Type 1)**	**-**	**22** [3]	**-**	**-**	**-**	**-**
	Semi-Trailer	**-**	**28** [3]	**-**	**-**	-	**-**
Option 3 FGD (2023 – 2076)	**Semi-Trailer**	**26**	**-**	**-**	**-**	**-**	**-**

[1] 10 of the 48 vehicle movements from Alpha are expected to originate from and be destined for Emerald.
[2] These movements are expected to be occasional on an as required basis.

[3] Haulage from limestone quary to Gracemere as a single semi-trailer and then coupled as a Type 1 Road Train from Gracemere to the Project site.
[4] Limestone is likely to be sourced from a quarry in Gladstone or Rockhampton. To maintain a conservative assessment, it has been assumed that the quarry will be located in Gladstone, though it is proposed that the pavement impact assessment be re-evaluated (if necessary) after the relevant technology and limestone sourcing contracts are confirmed.

As indicated in Table 5.7, majority of the heavy vehicle movements for the Project are expected to access the site from Gladstone and Alpha. Heavy vehicle traffic from Mackay, Brisbane and interstate have been excluded for the purpose of this assessment, given low and infrequent traffic volumes expected from these locations. The assumed haul route for heavy vehicle movements to/ from Gladstone and Alpha is via the Capricorn Highway.

It is assumed that traffic generation associate with heavy vehicles will occur within a single hour, coinciding with the network peak. All heavy vehicle movements are assumed to arrive in the AM peak and depart in the PM peak, similar to workforce generated traffic to establish a worst-case scenario for assessment. Based on the assumptions documented in the preceding sections, estimates of heavy vehicle traffic are summarised in Table 5.8.

Table 5.8: Hourly Heavy Vehicle Traffic Generation Summary

Design Year	AM Peak (veh / hr)		PM Peak (veh / hr)	
	In	Out	In	Out
2022	53	0	0	53
2023	53	0	0	53
2032 – No FGD	27	0	0	27
2032 – FGD Option 1	33	0	0	33
2032 – FGD Option 2	38	0	0	38
2032 – FGD Option 3	40	0	0	40

Vm / hr – vehicle movements per hour

6. ROAD LINK ASSESSMENT

06

6.1. Context of Road Link Assessment

The following section has been prepared to assess anticipated worst case Project impacts on the proposed haul route (Capricorn Highway between Gladstone and Jericho), with due consideration of forecast traffic volumes "with" and "without" the Project. This assessment has been undertaken in accordance with the principles outlined in GTIA which defines the impact assessment area to be:

> *"All road links where the development traffic exceeds 5% of the base traffic in either direction on the link's annual average daily traffic (AADT) in the year of opening of each stage."*

6.2. Identification of Impacted Road Links

Table 6.1 summarises the comparison of baseline traffic to worst case Project traffic (i.e. inclusive of the worst case traffic volumes associated with FGD Option 2) and shows where the 5% impact threshold is exceeded in the assessment years of 2022 and 2023.

Table 6.1: Road Link Assessment – Impact Identification Table

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	% Increase in AADT	
					2022	2023
181 - GLADSTONE - MT LARCOM ROAD	12.292	32.14	21.87	G	4%	9%
	12.292	32.14	30.29	A	4%	9%
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	24.28	G	2%	5%
	0	11.445	27.85	A	2%	5%
	11.445	45.42	26.32	G	2%	6%
	11.445	45.42	24.77	A	3%	6%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	5.69	5.97	37.15	A	2%	5%
	5.97	9.39	37.15	A	2%	5%
	9.39	10	37.15	A	2%	5%
	10	13.367	37.15	A	2%	5%
	13.367	17.856	24.67	A	3%	6%
	13.367	17.856	26.31	G	3%	6%
	17.856	51.62	27.53	G	3%	7%
	17.856	51.62	27.31	A	3%	7%
	51.62	73.35	30.43	G	4%	9%
	51.62	73.35	28.79	A	4%	8%
	73.35	106.38	28.79	A	4%	8%
	73.35	106.38	30.43	G	4%	9%
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	28.23	A	4%	9%
	0	36.04	25.65	G	4%	9%
	36.04	82.671	28.59	A	4%	8%
	36.04	82.671	21.14	G	4%	9%
	82.671	86.15	23.21	G	3%	7%
	82.671	86.15	22.88	A	3%	6%
	86.15	90.56	20.87	G	4%	10%
	86.15	90.56	20.95	A	4%	10%
	90.56	127.95	21.78	A	4%	11%

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	% Increase in AADT	
					2022	2023
	90.56	127.95	23.13	G	4%	11%
	127.95	157.46	16.07	A	4%	9%
	127.95	157.46	15.24	G	4%	9%
	157.46	157.56	16.07	A	4%	9%
	157.46	157.56	15.24	G	4%	9%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	0	1.08	20.45	A	7%	6%
	0	1.08	19.64	G	7%	7%
	1.08	2.17	20.43	G	18%	16%
	1.08	2.17	18.41	A	18%	17%
	2.17	43.3	19.8	G	36%	34%
	2.17	43.3	22.56	A	36%	33%
	43.3	70.531	24.85	G	84%	78%
	43.3	70.531	46.63	A	85%	79%
	70.531	107.95	23.15	A	106%	98%
	70.531	107.95	28.98	G	87%	81%
	107.95	167.94	33.24	G	91%	84%
	107.95	167.94	26.08	A	89%	82%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	22.63	A	301%	388%
	0	54.27	47.31	G	308%	398%

A link capacity assessment for these affected roads is provided in Section 6.3. It should be noted that the Gazetted direction is westbound and Against Gazetted direction is eastbound.

6.3. Road Link Capacity Assessment

The theoretical baseline road link capacity of affected road links (as identified in Section 6.2) has been calculated in accordance with *Austroads GTM: Part 3* for a single-lane flow of traffic. This applied methodology excludes overtaking lanes from the calculation and assumes a single lane of traffic flow in one direction, thereby being a conservative assessment. The guide mentions if single lane conditions without overtaking is retained over a significant length of the road, then as the traffic volume increases the speeds of all vehicles in a traffic stream tend to that of the slowest vehicle and stop-start conditions may develop. Once this occurs, the maximum flow rate of a single lane is reduced to an 'operational capacity' of about 1,800pcu/h.

In general, 1,800pcu/h can be regarded as the capacity of a single lane without overtaking, however capacity will be affected by factors such as the pavement width and restricted lateral clearances (e.g. shoulder width), the presence of heavy vehicles and the grade of the road. It is noted from data provided by TMR (received November 2018), that the affected road links of the Capricorn Highway have sections with lane widths of less than 3.6m and shoulder widths of less than 1.8m, as such appropriate capacity reduction factors are to be applied to determine the theoretical capacity of these road links.

The following equation as detailed in Austroads GTM: Part 3 has been used to calculate the capacity of affected link sections:

$$C = 1800 * f_w * f_{hv}$$

where

C = Capacity in veh/h under prevailing roadway and traffic conditions

f_w = adjustment factor for narrow lanes and shoulder (obtained from Table 6.2*)*

f_{hv} = adjustment factor for heavy vehicles = $1/(1+P_{hv}(E_{hv} - 1))$

P_{hv} = the proportion of heavy vehicles in traffic stream, expressed as a decimal

E_{hv} = the average passenger car equivalent for heavy vehicles (obtained from Table 6.3*)*

6.3.1. Narrow Lane and Shoulder Adjustment Factor

Adjustment factors for narrow lane and shoulder widths is required to determine the theoretical capacity of affected sections. It has been assumed that the typical narrowest lane widths are 3.2m and typical narrowest shoulders are 0.2m. Adjustment factors for lane and shoulder widths are provided in *Austroads GTM: Part 3*, however these factors have only been provided for set lane and shoulder widths. As such, interpolation (linear) of these factors has been undertaken to correspond to the assumed lane and shoulder widths. Factors reproduced from *Austroads GTM: Part 3* are shown in Table 6.2, with interpolated factors highlighted in blue.

Table 6.2: Lane Adjustment Factors

Lateral Clearance	Lane Width										
	3.7m	**3.6m**	**3.5m**	**3.4m**	**3.3m**	**3.2m**	**3.1m**	**3m**	**2.9m**	**2.8m**	**2.7m**
2m	1.00	0.98	0.96	0.94	0.92	0.90	0.86	0.82	0.78	0.74	0.70
1.5m	0.95	0.93	0.91	0.89	0.87	0.85	0.81	0.78	0.74	0.70	0.67
1m	0.90	0.88	0.86	0.84	0.82	0.80	0.77	0.73	0.70	0.66	0.63
0.8m	0.85	0.83	0.81	0.80	0.78	0.76	0.73	0.70	0.67	0.64	0.60
0.7m	0.83	0.81	0.79	0.77	0.76	0.74	0.71	0.68	0.65	0.62	0.59
0.5m	0.78	0.76	0.75	0.73	0.72	0.70	0.67	0.65	0.62	0.59	0.57
0.2m	0.73	0.71	0.70	0.69	0.67	**0.66**	0.64	0.61	0.59	0.56	0.54
0m	0.65	0.64	0.63	0.62	0.61	0.60	0.58	0.56	0.54	0.52	0.50

Based on the information presented in Table 6.2, lane adjustment factors for all affected links is 0.66.

6.3.2. Heavy Vehicle Adjustment Factor

As mentioned in Section 6.3, heavy vehicle adjustment factor is calculated based on the proportion of heavy vehicles in a traffic stream, and the average passenger car equivalent for heavy vehicles. The proportion of heavy vehicles in the existing traffic stream for the affected road links, has been extracted from the AADT reports for each direction, and are detailed in Table 6.1.Average passenger car equivalent conversion factors for heavy vehicles is based on the grade of the road, with these relevant factors reproduced from *Austroads GTM: Part 3* in Table 6.3.

Table 6.3: Average Passenger Car Equivalents for Heavy Vehicles on Grades

Grade	Passenger Car Equivalent (E_{hv})
Level	2.00
Moderate	4.00
Long Sustained	8.00

For this assessment, the grade of all affected road links has been assumed to be 'moderate' which equates to a passenger car equivalent factor of 4.

Based on the above-mentioned proportions of heavy vehicles and average passenger car equivalent factor, heavy vehicle adjustment factors to determine the baseline capacity of the affected road links are detailed in Table 6.4.

Table 6.4: Heavy Vehicle Adjustment Factors

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	Heavy Vehicle Adjustment Factor (f_{hv})
181 - GLADSTONE - MT LARCOM ROAD	0	1.409	14.72	G	0.69
	0	1.409	20.26	A	0.62
	1.409	2.277	16.05	G	0.67
	1.409	2.277	16.2	A	0.67
	2.277	3.2	16.05	G	0.67
	2.277	3.2	16.2	A	0.67
	3.2	3.258	16.2	A	0.67
	3.2	3.258	16.05	G	0.67
	4.625	7.063	15.99	A	0.68
	4.625	7.063	13.5	G	0.71
	7.063	9.325	15.99	A	0.68
	7.063	9.325	13.5	G	0.71
	9.325	12.292	13.5	G	0.71
	9.325	12.292	15.99	A	0.68
	12.292	32.14	21.87	G	0.60
	12.292	32.14	30.29	A	0.52
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	24.28	G	0.58
	0	11.445	27.85	A	0.54
	11.445	45.42	26.32	G	0.56
	11.445	45.42	24.77	A	0.57
	45.42	85.308	23.77	A	0.58
	45.42	85.308	21.66	G	0.61
	85.308	108.938	28.33	G	0.54
	85.308	108.938	26.17	A	0.56
	108.938	114.088	27.05	A	0.55
	108.938	114.088	24.95	G	0.57
	114.088	114.388	24.95	G	0.57
	114.088	114.388	27.05	A	0.55
16A -	5.69	5.97	37.15	A	0.47
	5.69	5.97	24.82	G	0.57

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	Heavy Vehicle Adjustment Factor (f_{hv})
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	5.97	9.39	24.82	G	0.57
	5.97	9.39	37.15	A	0.47
	9.39	10	37.15	A	0.47
	9.39	10	24.82	G	0.57
	10	13.367	24.82	G	0.57
	10	13.367	37.15	A	0.47
	13.367	17.856	24.67	A	0.57
	13.367	17.856	26.31	G	0.56
	17.856	51.62	27.53	G	0.55
	17.856	51.62	27.31	A	0.55
	51.62	73.35	30.43	G	0.52
	51.62	73.35	28.79	A	0.54
	73.35	106.38	28.79	A	0.54
	73.35	106.38	30.43	G	0.52
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	28.23	A	0.54
	0	36.04	25.65	G	0.57
	36.04	82.671	28.59	A	0.54
	36.04	82.671	21.14	G	0.61
	82.671	86.15	23.21	G	0.59
	82.671	86.15	22.88	A	0.59
	86.15	90.56	20.87	G	0.61
	86.15	90.56	20.95	A	0.61
	90.56	127.95	21.78	A	0.60
	90.56	127.95	23.13	G	0.59
	127.95	157.46	16.07	A	0.67
	127.95	157.46	15.24	G	0.69
	157.46	157.56	16.07	A	0.67
	157.46	157.56	15.24	G	0.69
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	0	1.08	20.45	A	0.62
	0	1.08	19.64	G	0.63
	1.08	2.17	20.43	G	0.62
	1.08	2.17	18.41	A	0.64
	2.17	43.3	19.8	G	0.63
	2.17	43.3	22.56	A	0.60
	43.3	70.531	24.85	G	0.57
	43.3	70.531	46.63	A	0.42
	70.531	107.95	23.15	A	0.59
	70.531	107.95	28.98	G	0.53
	107.95	167.94	33.24	G	0.50
	107.95	167.94	26.08	A	0.56
	0	54.27	22.63	A	0.60

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	Heavy Vehicle Adjustment Factor (f_{hv})
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	47.31	G	0.41

6.4. Projected Volumes vs Theoretical Capacity

Based on the factors determined in the Sections 6.3.1 and 6.3.2 and application of the equation detailed in Section 6.3, the theoretical baseline capacity of affected road links and a comparison to projected traffic volumes (project traffic, baseline traffic with growth and cumulative traffic) is as shown in Table 6.5.

Table 6.5: Theoretical Baseline Road Link Capacity of Affected Links

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	Theoretical Baseline Capacity (veh / hr)	Projected 2022 Traffic Volume (veh / hr)	Projected 2023 Traffic Volume (veh / hr)
181 - GLADSTONE - MT LARCOM ROAD	12.292	32.14	21.87	G	717	259	279
	12.292	32.14	30.29	A	622	259	280
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	24.28	G	687	460	486
	0	11.445	27.85	A	647	476	503
	11.445	45.42	26.32	G	664	427	452
	11.445	45.42	24.77	A	682	409	433
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	5.69	5.97	37.15	A	562	437	439
	5.97	9.39	37.15	A	562	437	439
	9.39	10	37.15	A	562	437	439
	10	13.367	37.15	A	562	437	439
	13.367	17.856	24.67	A	683	346	346
	13.367	17.856	26.31	G	664	386	387
	17.856	51.62	27.53	G	651	305	303
	17.856	51.62	27.31	A	653	309	307
	51.62	73.35	30.43	G	621	256	253
	51.62	73.35	28.79	A	637	276	274
	73.35	106.38	28.79	A	637	276	273
	73.35	106.38	30.43	G	621	262	259
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	28.23	A	643	253	250
	0	36.04	25.65	G	671	252	248
	36.04	82.671	28.59	A	640	274	271
	36.04	82.671	21.14	G	727	263	260
	82.671	86.15	23.21	G	700	341	340
	82.671	86.15	22.88	A	704	349	348
	86.15	90.56	20.87	G	731	233	229
	86.15	90.56	20.95	A	730	235	231
	90.56	127.95	21.78	A	719	212	207
	90.56	127.95	23.13	G	701	211	207

Road Name	Chainage Start	Chainage End	Heavy Vehicle Percentage	Direction	Theoretical Baseline Capacity (veh / hr)	Projected 2022 Traffic Volume (veh / hr)	Projected 2023 Traffic Volume (veh / hr)
	127.95	157.46	16.07	A	802	268	265
	127.95	157.46	15.24	G	815	268	265
	157.46	157.56	16.07	A	802	268	265
	157.46	157.56	15.24	G	815	268	265
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	0	1.08	20.45	A	736	629	643
	0	1.08	19.64	G	748	594	607
	1.08	2.17	20.43	G	737	267	271
	1.08	2.17	18.41	A	765	260	263
	2.17	43.3	19.8	G	745	150	150
	2.17	43.3	22.56	A	708	152	152
	43.3	70.531	24.85	G	681	88	87
	43.3	70.531	46.63	A	495	87	86
	70.531	107.95	23.15	A	701	78	77
	70.531	107.95	28.98	G	635	86	85
	107.95	167.94	33.24	G	595	84	83
	107.95	167.94	26.08	A	667	85	84
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	22.63	A	708	217	269
	0	54.27	47.31	G	491	216	268

It should be noted that the Gazetted direction is westbound and Against Gazetted direction is eastbound.

As presented in Table 6.5, all affected road links are expected to operate within their theoretical capacity with the combined cumulative Project generated traffic and forecasted background traffic, for both directions and for all design years.

7. INTERSECTION IMPACT ASSESSMENT

07

7.1. Capricorn Highway/ Saltbush Road Intersection

The Project proposes to gain vehicular access to the site via Saltbush Road as discussed in Section 2.1 to provide a more direct access route to the mine from Capricorn Highway. In order to facilitate this access, the Project proposes to upgrade the existing Capricorn Highway/ Saltbush Road intersection.

7.1.1. Turn Warrant Assessment

A turn warrant assessment of the Capricorn Highway/ Saltbush Road intersection has been undertaken in accordance with the methodology provided in the *RPDM Volume 3: Part 4A*. Results of the assessment (included at Appendix C) conclude that turn treatments at the intersection should take the form of:

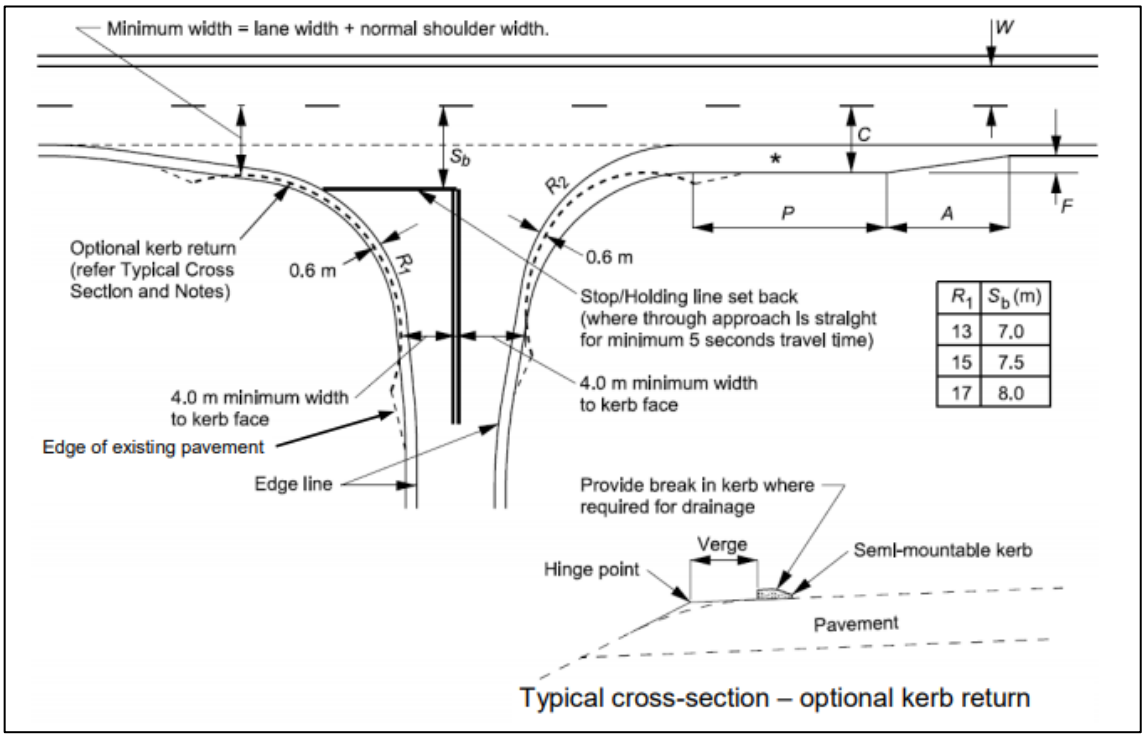
- Left-Turn: Basic Left Turn (BAL)
- Right-Turn: Short Channelised Right Turn (CHR[s]).

The turn warrant assessment indicates that BAL and CHR (s) turn treatments are required at the existing Capricorn Highway/ Saltbush Road intersection to cater for Project generated traffic. It should be noted that these turn treatments are required at the year of opening (2021), which is prior to the peak construction design year (2022).

7.1.2. Intersection Form

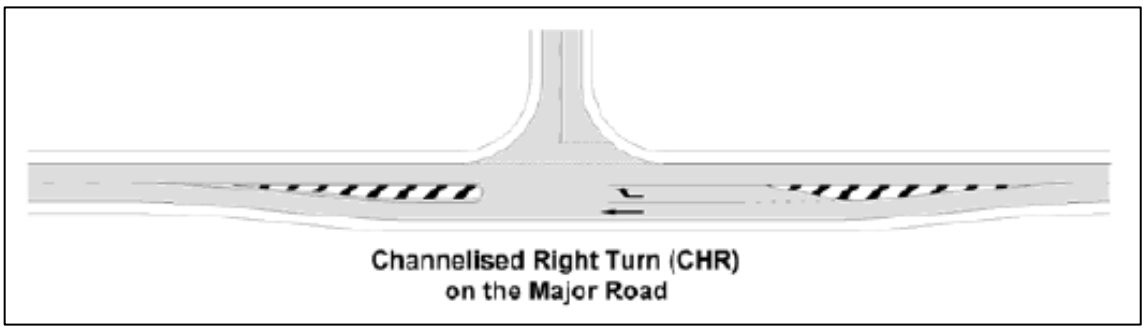
The required form for the left and right turn treatment at Capricorn Highway/ Saltbush Road is provided in Figure 7.1 and Figure 7.2 with a concept sketch of the intersection form at Appendix D. This treatment is based on the requirements set out in *Austroads GRD: Part 4A*.

Figure 7.1: Basic Left Turn Treatment - General Form



R_1	S_b (m)
13	7.0
15	7.5
17	8.0

Figure 7.2: Channelised Right Turn Treatment – General Form



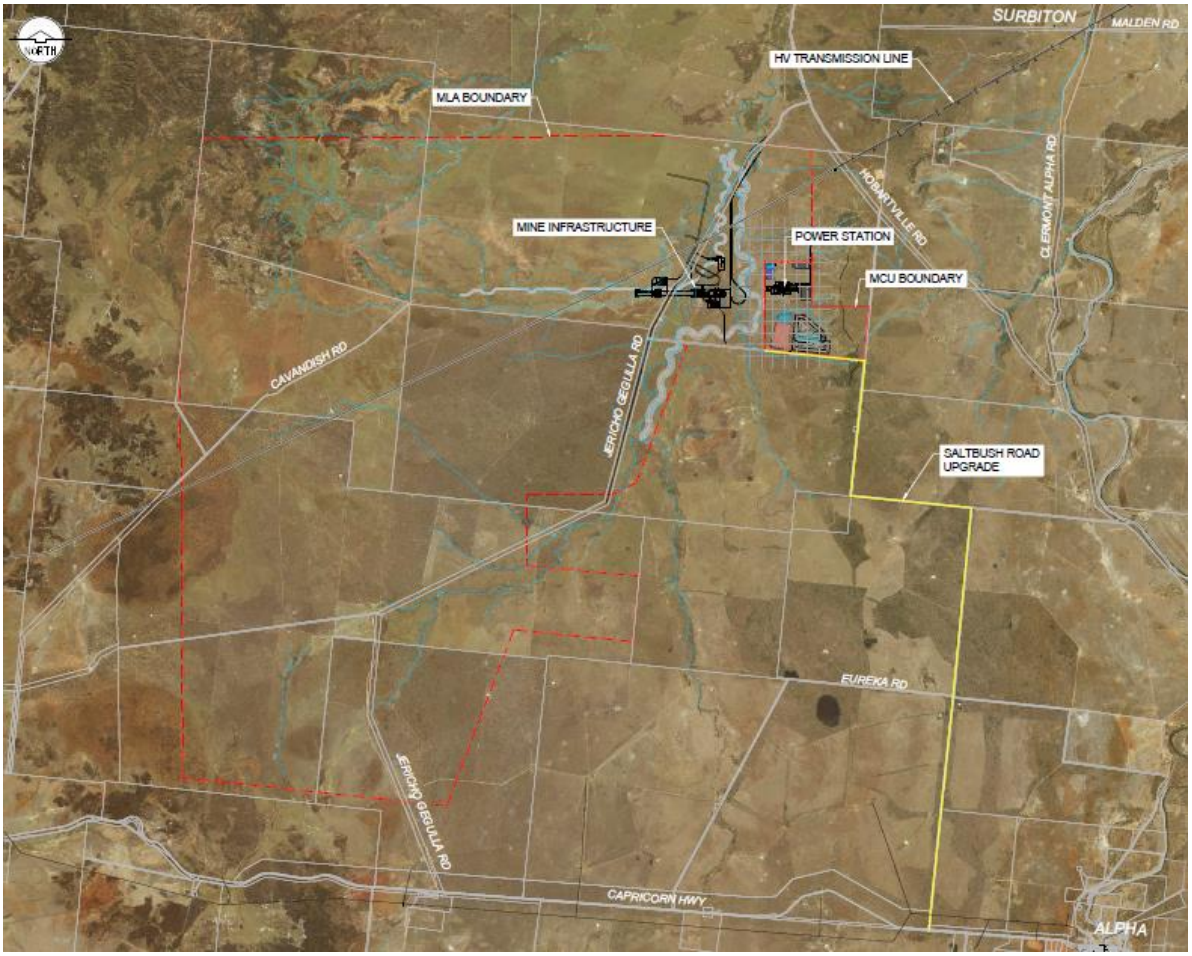
7.2. Other State-Controlled Road Intersections

Traffic generated impacts at other SCR intersections have been considered within this RIA, for impacted road links in Section 5. Given that Project traffic is typically adding to the through movements along these intersections, it is expected that the road link assessment captures any Project impacts on SCR intersections.

7.3. Project Access (Saltbush Road)

The Project proposes to gain vehicular access to the site via Saltbush Road as discussed in Section 2.1 to provide a more direct access route to the mine from the Capricorn Highway. In order to facilitate this access, the Proponent intends to upgrade Saltbush Road from the Capricorn Highway to the power station site as shown in Figure 7.3. The upgrade will bring the road to a two lane sealed road suitable for the classes of heavy vehicles required to construct and operate the power plant and mine. The upgrade will include appropriate design allowances for expected over-mass vehicles and bend geometry will allow for expected road train and oversized vehicle access. The upgrade will include sealing of Saltbush Road and providing a carriageway of 8m in width and 1m verge on both sides of the road, in accordance with *Austroads GRD: Part 3*. Driveways will be assessed for appropriate line of site geometry and driveway to road intersections will be upgraded as necessary and as agreed with landholders. A sketch of the proposed form of Saltbush Road / Capricorn Highway intersection is included in Appendix D.

Figure 7.3: Saltbush Road Upgrade



8. PAVEMENT IMPACT ASSESSMENT

08

8.1. Introduction

Identification of pavement impacts to SCRs was undertaken in-line TMR's GTIA guidelines and the associated Pavement Impact Assessment Practice Note for the Capricorn Highway between Jericho and Rockhampton, the Bruce Highway between Benaraby and Rockhampton, and Gladstone – Mount Larcome Road. Background AADT volumes and Standard Axle Repetitions (SAR) were based on data provided by TMR in a marginal cost spreadsheet, and Project generated traffic SARs were calculated based on anticipated heavy vehicle movements for the Project. Anticipated pavement loadings of adjacent Galilee Coal Mine Project were also added to the background generated SAR's (refer to Section 4) to undertake a cumulative pavement impact assessment.

Per the TMR assessment guidelines, the pavement impact identification was undertaken based on SAR4 loading, with monetary contributions then determined based on the pavement type dependent loading corresponding to SAR4, SAR5 or SAR12.

Impact identification and resultant monetary contributions which would be required to offset pavement impacts, have been determined for the following scenarios:

- Scenario 1: Project with No FGD (for comparative purposes)
- Scenario 2: Project with Option 1 FGD, which includes heavy vehicle movements for Limestone delivery via Gladstone
- Scenario 3: Project with Option 2 FGD, which includes heavy vehicle movements for Limestone delivery via Gladstone
- Scenario 4: Project with Option 3 FGD, which includes heavy vehicle movements for acid removal to Alpha.

8.2. SAR Conversion Factors

SAR conversion factors have been provided in TMR's GTIA guidelines and the Pavement Impact Assessment Practice Note. The adopted SAR4 conversion factors for impact identification are as detailed in Table 8.1.

Table 8.1: SAR Conversion Factors

Vehicle Type	Vehicle Class	SAR Conversion Factor
Bus/ Truck	4	3.6
Semi-Trailer	7	5.1
B-Double	10	6.3
Oversized	11	8.4

8.3. Impact Identification

As per the Pavement Impact Assessment methodology, the baseline heavy vehicle SARs were compared with Project generated heavy vehicle SARs for the design years of the Pavement Impact Assessment, the years of opening of each stage. A summary of the Project generated heavy vehicle movements (and SARs) on SCRs anticipated to be used by the Project is presented in Appendix E for the relevant design horizons.

Pavement Impacts (i.e. SAR impacts) of greater than 5% have been identified for the road links along the Capricorn Highway, as presented in Table 8.2, Table 8.3, Table 8.4 and Table 8.5, for the design years of 2022 and 2023.

Table 8.2: Pavement Impact Identification – Scenario 1

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
181 - GLADSTONE - MT LARCOM ROAD	0	1.409	G	5%	4%
	1.409	2.277	G	5%	5%
	2.277	3.2	G	5%	5%
	3.2	3.258	G	5%	5%
	4.625	7.063	G	6%	6%
	7.063	9.325	G	6%	6%
	9.325	12.292	G	6%	6%
	12.292	32.14	G	8%	8%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	17.856	51.62	G	5%	4%
	51.62	73.35	G	6%	5%
	73.35	106.38	G	5%	5%
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	G	7%	6%
	36.04	82.671	G	7%	7%
	82.671	86.15	G	5%	5%
	86.15	90.56	G	9%	8%
	90.56	127.95	G	9%	8%
	127.95	157.46	G	10%	9%
	157.46	157.56	G	10%	9%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	1.08	2.17	G	8%	8%
	2.17	43.3	G	16%	15%
	43.3	70.531	G	26%	25%
	70.531	107.95	G	24%	24%
	107.95	167.94	G	23%	23%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	A	7%	7%
	0	54.27	G	44%	44%

Table 8.3: Pavement Impact Identification – Scenario 2

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
181 - GLADSTONE - MT LARCOM ROAD	0	1.409	G	5%	7%
	1.409	2.277	G	5%	7%
	2.277	3.2	G	5%	7%
	3.2	3.258	G	5%	7%
	3.258	3.37	G	4%	6%
	3.37	3.756	G	4%	6%
	3.756	3.892	G	4%	6%
	3.892	4.625	G	4%	6%
	4.625	7.063	G	6%	8%
	7.063	9.325	G	6%	8%
	9.325	12.292	G	6%	8%
	12.292	32.14	G	8%	10%

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	G	4%	6%
	11.445	45.42	G	4%	6%
	45.42	85.308	G	4%	6%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	13.367	17.856	G	4%	5%
	17.856	51.62	G	5%	6%
	51.62	73.35	G	6%	7%
	73.35	106.38	G	5%	7%
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	G	7%	8%
	36.04	82.671	G	7%	9%
	82.671	86.15	G	5%	7%
	86.15	90.56	G	9%	11%
	90.56	127.95	G	9%	11%
	127.95	157.46	G	10%	12%
	157.46	157.56	G	10%	12%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	1.08	2.17	G	8%	10%
	2.17	43.3	G	16%	20%
	43.3	70.531	G	26%	33%
	70.531	107.95	G	24%	30%
	107.95	167.94	G	23%	29%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	A	7%	8%
	0	54.27	G	44%	44%

Table 8.4: Pavement Impact Identification – Scenario 3

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
181 - GLADSTONE - MT LARCOM ROAD	0	1.409	G	5%	8%
	1.409	2.277	G	5%	8%
	2.277	3.2	G	5%	8%
	3.2	3.258	G	5%	8%
	3.258	3.37	G	4%	7%
	3.37	3.756	G	4%	7%
	3.756	3.892	G	4%	7%
	3.892	4.625	G	4%	7%
	4.625	7.063	G	6%	9%
	7.063	9.325	G	6%	9%
	9.325	12.292	G	6%	9%
	12.292	32.14	G	8%	12%
10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	0	11.445	G	4%	7%
	11.445	45.42	G	4%	7%
	45.42	85.308	G	4%	7%
	108.938	114.088	G	4%	6%
	114.088	114.388	G	4%	6%

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
	114.388	116.961	G	4%	6%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	5.69	5.97	G	4%	5%
	5.97	9.39	G	4%	5%
	9.39	10	G	4%	5%
	10	13.367	G	4%	5%
	13.367	17.856	G	4%	6%
	17.856	51.62	G	5%	7%
	51.62	73.35	G	6%	8%
	73.35	106.38	G	5%	8%
16B - CAPRICORN HIGHWAY (DUARINGA – EMERALD)	0	36.04	G	7%	10%
	36.04	82.671	G	7%	11%
	82.671	86.15	G	5%	8%
	86.15	90.56	G	9%	13%
	90.56	127.95	G	9%	13%
	127.95	157.46	G	10%	14%
	157.46	157.56	G	10%	14%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	0	1.08	G	4%	5%
	1.08	2.17	G	8%	12%
	2.17	43.3	G	16%	23%
	43.3	70.531	G	26%	38%
	70.531	107.95	G	24%	36%
	107.95	167.94	G	23%	34%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	A	7%	9%
	0	54.27	G	44%	44%

Table 8.5: Pavement Impact Identification – Scenario 4

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
181 - GLADSTONE - MT LARCOM ROAD	0	1.409	G	5%	4%
	1.409	2.277	G	5%	5%
	2.277	3.2	G	5%	5%
	3.2	3.258	G	5%	5%
	4.625	7.063	G	6%	6%
	7.063	9.325	G	6%	6%
	9.325	12.292	G	6%	6%
	12.292	32.14	G	8%	8%
16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	17.856	51.62	G	5%	4%
	51.62	73.35	G	6%	5%
	73.35	106.38	G	5%	5%
16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)	0	36.04	G	7%	6%
	36.04	82.671	G	7%	7%
	82.671	86.15	G	5%	5%

Road Name	Chainage Start	Chainage End	Direction	Forecast 2022 Pavement Impact	Forecast 2023 Pavement Impact
	86.15	90.56	G	9%	8%
	90.56	127.95	G	9%	8%
	127.95	157.46	G	10%	9%
	157.46	157.56	G	10%	9%
16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)	1.08	2.17	G	8%	8%
	2.17	43.3	G	16%	15%
	43.3	70.531	G	26%	25%
	70.531	107.95	G	24%	24%
	107.95	167.94	G	23%	23%
16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	0	54.27	A	7%	24%
	0	54.27	G	44%	44%

8.4. Pavement Impact Contribution

As per the Pavement Impact Assessment (PIA) methology, contributions have been assessed based on the costing pavement type and marginal cost provided by TMR. The monetary contributions have been calculated based on the corresponding SAR4, SAR5, and SAR12 impacts consistent with the PIA methodology for a period up to 20 years following the opening of the final stage.

The monetary contributions have been calculated based on the impacted road section segments of the Capricorn Highway (section 16A, 16B, 16C and 16D), the Bruce Highway (section 10E), and Gladstone- Mount Larcom Road (181) for the years where an annual impact of greater than 5% was identified. A summary of the monetary contributions required for the given heavy vehicle generation and options proposed is provided in Table 8.6.

Table 8.6: Pavement Impact Assessment Monetary Contributions

Phase	Scenario 1: No FGD	Scenario 2: FGD Option 1	Scenario 3: FGD Option 2	Scenario 4: FGD Option 3
Construction (2021 – 2022)	$190,752	$190,752	$190,752	$190,752
Construction + Operations Overlap (2023)	$187,637	$292,278	$316,279	$192,171
Operations (2024 – 2042)	$1,137,590	$2,343,854	$3,387,578	$1,390,971
Combined Total (i.e. life of project)	$1,515,979	$2,796,983	$3,894,609	$1,773,893

The pavement impact contribution identified for the Project varies between $1,515,979 and $3,894,609, depending on the technology selected. A summary of pavement contributionm by road section (per scenario) is provided in Appendix F.

The Proponent has proposed that the pavement impact contribution be confirmed after the relevant technology and limestone sourcing contract (if necessary) have been finalised. The recalculation of the pavement contribution (if required) and subsequent pavement contribution payment to TMR is proposed to occur prior to the commencement of any construction and heavy vehicle haul operations.

9. ROAD SAFETY RISK ASSESSMENT

09

9.1. Risk Identification

Safety on the SCR network is a key consideration for developments interacting with the SCR network. The following potential road safety risks have been identified as a result of the Project with a risk assessment and mitigation measures detailed in Section 9.2:

- Increased through traffic along SCR network resulting in congestion and potential for vehicle collision
- Changed intersection form of Capricorn Highway/ Saltbush Road may cause confusion for motorists
- Increased risk of vehicle collision due to driver fatigue
- Debris/Construction material on roads during the construction phase of the Project
- Transportation of Hazardous and Dangerous during construction and operations
- Project generated vehicles queuing onto level crossing on Saltbush Road.

9.2. Risk Assessment & Mitigation

In accordance with GTIA, *"development should ensure that a road's safety is not significantly worsened as a result of the development and that any pre-existing or development-introduced unacceptable safety risk is addressed".* GTIA defines significantly worsened as change in safety risk rating (i.e. medium to high). Traffic safety risks are scored based on the matrix shown in Figure 9.1.

Figure 9.1:Traffic Safety Risk Scoring Matrix

		Potential consequence				
		Property only (1)	Minor injury (2)	Medical treatment (3)	Hospitalisation (4)	Fatality (5)
Potential likelihood	Almost certain (5)	M	M	H	H	H
	Likely (4)	M	M	M	H	H
	Moderate (3)	L	M	M	M	H
	Unlikely (2)	L	L	M	M	M
	Rare (1)	L	L	L	M	M

L: Low risk
M: Medium risk
H: High risk

Potential road safety risks as a result of the Project, identified in Section 9.1 have been rated as presented in Figure 9.2. All risks are expected to be within a medium level with the development (and mitigation measures where needed) as summarised in Figure 9.2. Mitigation measures detailed in Figure 9.2 are to be included in the RMP.

Figure 9.2: Project Related Road Safety Risk Assessment

Risk Item	Without Development			With Development			Mitigation Measures	With Development & Mitigation		
	Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
Increased through traffic along SCR network resulting in congestion and potential for vehicle collision	1	2	L	2	2	L	No Action			
Changed intersection form of Capricorn Highway / Saltbush Road intersection may cause confusion to motorists	1	1	L	4	3	M	Ensure access intersections are designed appropriately to meet the turn warrant requirements detailed in section 6.2 of the RIA, coupled with signage to alert motorists of changed conditions	2	2	L
Increased risk of vehicle collision due to driver fatigue	3	5	H	4	4	H	Monitoring of workforce hours and driver behaviours to be incoporated into the RMP to address this risk	2	5	M
Debris/Construction material on roads during the construction phase of the project	2	2	L	4	2	M	Ensure a construction management plan is in place to address impacts on SCR's as a result of project generated debris and construction materials	2	2	L
Transportation of Hazardous goods and Dangerous during construction and operations	1	2	L	3	5	H	Transportation of hazardousa and dangerous goods is to comply with requirements of Australian Dangerous Goods Code	2	2	L
Transportation of Hazardous and Dangerous goods during construction and operations	1	2	L	3	5	H	Transportation of hazardous and dangerous goods is to comply with requirements of Australian Dangerous Goods Code	2	2	L
Project generated vehicles queuing onto level crossing on Saltbush Road	2	5	M	4	5	H	Upgrade existing level crossing to boom gates to increase road user safety	1	5	M

In addition to the Road Safety Risk Assessment analysis of road crash data for the Capricorn Highway was undertaken to assess current levels of road safety. Road crash data for the Capricorn Highway was sourced from TMR (obtained November 2018) for a five-year period between 2013 – 2018. This crash data provides information on the number of crashes along the Capricorn Highway, categorised into the following:

- Crash resulting in fatality
- Crash resulting in hospitalisation
- Crash resulting in medical treatment
- Minor crash
- Crash resulting in property damage only.

Analysis of the recorded accidents on the Capricorn Highway, proximate to the Project and specifically near Saltbush Road, indicates the following:

- There were two recorded accidents proximate to the Project in the preceding five-year period
- These crashes did not result in fatality
- Both crashes involved vehicles colliding with an object and veering off the carriageway.

It is considered that this type of crash is typical for the use, type and function of the Capricorn Highway within the area, and therefore the crash data suggests that the Capricorn Highway proximate to the Project does not pose any atypical safety risks or hazards that need to be factored into the access design.

10. CONSIDERATION OF OTHER IMPACTS

10

10.1. Oversized Vehicles

The Project is likely to utilise oversized vehicles for some of the transport activities as part of construction and operations. It is noted that the use of these vehicles will be undertaken in accordance with the National Heavy Vehicle Regulator guidelines and be subject to permit applications and TMR approvals for the use of such vehicles. The use of these vehicles will be assessed as part of these permit applications.

10.2. Rail Level Crossings

One level crossing (without boom gates) has been identified on Saltbush Road, proximate to Capricorn Highway/ Saltbush Road intersection. An inspection of this rail level crossing and publicly available QR network details, indicates that the level crossing is a single-track lane with associated train lines (Longreach – Brisbane rail line and Central West System) expected to have infrequent services (approximately 4 scheduled services per week). As such, train services are not expected to be impacted by anticipated Project road volumes, however, this is to be confirmed by Queensland Rail by way of an Australian Level Crossing Assessment Model assessment which is expected to be undertaken post submission of the planning application.

Furthermore, it is recommended that this exiting level crossing is upgraded to boom gates for road user safety, such that Project generated vehicles do not queue on the level crossing.

10.3. Road Use Management Plan

The preparation of a RMP will be required as the Project progresses. The RMP will include consideration of:

- Public safety at worksites
- Obstructions to road users
- Workforce management strategies to reduce traffic generation
- Management of driver behaviour to ensure that Project traffic is driving in safe manner
- Driver fatigue management strategies
- Defining responsibilities and procedures for implementation, monitoring and RMP strategy amendment.

The outcomes of the RIA are intended to inform the development of the RMP, which will in turn influence the future transport strategies to be adopted. The impact mitigation strategies adopted within the RMP will form the basis upon which State and Local government will monitor and assess the construction and operational activities of the Project.

Based on the RIA findings, potential strategies to be considered as part of the RMP to offset road impacts include:

- Adjusting shift times and heavy vehicle movement scheduling such that Project traffic peaks do not coincide with the network peak periods
- Policies focussing on driver behaviour and fatigue management.

11. CONCLUSION

11

CONCLUSION

Based on the analysis and discussions presented within this report, the following conclusions are made:

- Worst case traffic demands for the Project are expected to occur in:
  - 2022 (Project Year 2): Peak construction phase of Project
  - 2023 (Project Year 3): Opening year of operations of Project
  - 2032 (Project Year 12): 10-year design horizon from operations commencement of Project
  - 2042 (Project Year 22): 20-year design horizon from operations commencement of Project.
- A total of eight road links on the Capricorn Highway are expected to have Project traffic volumes which have greater than 5% of baseline traffic volumes, with all road links expected to operate within theoretical capacity.
- The Project proposes to gain access via Saltbush Road and hence proposes to upgrade Saltbush Road and the existing intersection with Capricorn Highway.
- A turn warrant assessment indicates that BAL and CHR (s) turn treatments are required on Capricorn Highway at Saltbush Road to cater for Project generated traffic.
- Based on the calculated development SAR's pavement impacts of greater than 5% have been identified for a number of road links on the Capricorn Highway, Bruce Highway and Mount Larcom Road. A monetary contribution will likely be required to ameliorate the impact. The results indicate that the impact correlates to a monetary contribution between $1,515,979 and $3,894,609, based on the option which proceeds.
- The Proponent has proposed that the pavement impact contribution be confirmed after the relevant technology and limestone sourcing contract (if necessary) have been finalised. The recalculation of the pavement contribution (if required) and subsequent pavement contribution payment to TMR is proposed to occur prior to the commencement of any construction and heavy vehicle haul operations
- Based on the Road Safety Risk Assessment all identified risks associated with the Project are expected to be within a medium level.

Based on the assessment and findings of this traffic impact assessment it is concluded that there are no reasonable or relevant transport planning and engineering grounds that may arise which would give reason to not approve this Project's planning application.

A. AADT SEGMENT REPORTS

A

Traffic Analysis and Reporting System
AADT Segment Analysis Report (Complete)
Road Section 181 - GLADSTONE - MT LARCOM ROAD
Traffic Year 2017

Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	1.409 km	60071	1.200 km	G'stone-Mt Larcom Rd 200m N Lord St	3,352	3,364	6,716	1.72388	1.73005	3.45394	2017	2
404	1.409 km	3.258 km	60073	2.550 km	G'stone-Mt Larcom Rd 50m S Auckland Ck	2,592	2,425	5,017	1.74930	1.63660	3.38590	2017	3
404	3.258 km	4.625 km	61052	3.344 km	G'stone-Mt Larcom Rd 500m S Red Rover Rd	3,753	3,698	7,451	1.87258	1.84514	3.71771	2017	4
404	4.625 km	12.292 km	60074	6.270 km	G'stone-Mt Larcom Rd1km N Calliope River	2,617	2,217	4,834	7.32356	6.20417	13.52773	2017	5
404	12.292 km	32.140 km	60076	16.451 km	G'stone-Mt Larcom Rd 150m N Yarwun Rd	1,179	1,204	2,383	8.54129	8.72240	17.26369	2017	6
								Totals	21.21061	20.13836	41.34897		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	1.409 km	60071	1.200 km	G'stone-Mt Larcom Rd 200m N Lord St	473	14.11%	417	12.40%	890	13.25%	0.24326	0.21446	0.45771	2017	2
404	1.409 km	3.258 km	60073	2.550 km	G'stone-Mt Larcom Rd 50m S Auckland Ck	479	18.48%	522	21.53%	1,001	19.95%	0.32327	0.35229	0.67556	2017	3
404	3.258 km	4.625 km	61052	3.344 km	G'stone-Mt Larcom Rd 500m S Red Rover Rd	841	22.41%	762	20.61%	1,603	21.51%	0.41962	0.38020	0.79982	2017	4
404	4.625 km	12.292 km	60074	6.270 km	G'stone-Mt Larcom Rd1km N Calliope River	587	22.43%	512	23.09%	1,099	22.73%	1.64269	1.43281	3.07550	2017	5
404	12.292 km	32.140 km	60076	16.451 km	G'stone-Mt Larcom Rd 150m N Yarwun Rd	363	30.79%	364	30.23%	727	30.51%	2.62976	2.63701	5.26677	2017	6
											Totals	5.25860	5.01676	10.27537		

Site 60071. Point 260000128.
G'stone-Mt Larcom Rd 200m N Lord St.

1.20 km

The width of each Road Segment is proportional to its AADT.

0.00 km

Start Point 260000129. Glenlyon St to Mt Larcom @ Dawson Rd.

1.41 km

End Point 260000130. Hanson Road to Mt Larcom @ Hilderbrand St.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-13.00%	-11.41%	-3.58%
A	-9.84%	-11.00%	-4.26%
B	-11.45%	-11.21%	-3.94%

All Vehicles (00)

G	3,352	100%
A	3,364	100%
B	6,716	100%

Light Vehicles (0A)

G	2,878	85.86%
A	2,946	87.57%
B	5,824	86.72%

Heavy Vehicles (0B)

G	473	14.11%
A	417	12.40%
B	890	13.25%

Short Vehicles (1A)

G	2,878	85.86%
A	2,946	87.57%
B	5,824	86.72%

Trucks and Buses (1B)

G	302	9.01%
A	221	6.57%
B	523	7.79%

Articulated Vehicles (1C)

G	104	3.10%
A	115	3.42%
B	219	3.26%

Road Trains (1D)

G	67	2.00%
A	81	2.41%
B	148	2.20%

Short 2-Axle Vehicles (2A)

G	2,826	84.31%
A	2,898	86.15%
B	5,724	85.23%

Short Vehicles Towing (2B)

G	52	1.55%
A	48	1.43%
B	100	1.49%

2-Axle Trucks and Buses (2C)

G	241	7.19%
A	157	4.67%
B	398	5.93%

3-Axle Trucks and Buses (2D)

G	47	1.40%
A	51	1.52%
B	98	1.46%

4-Axle Trucks (2E)

G	14	0.42%
A	13	0.39%
B	27	0.40%

3-Axle Articulated (2F)

G	3	0.09%
A	1	0.03%
B	4	0.06%

4-Axle Articulated (2G)

G	4	0.12%
A	3	0.09%
B	7	0.10%

5-Axle Articulated (2H)

G	6	0.18%
A	7	0.21%
B	13	0.19%

6-Axle Articulated (2I)

G	91	2.71%
A	104	3.09%
B	195	2.90%

B Double (2J)

G	67	2.00%
A	81	2.41%
B	148	2.20%

Double Road Trains (2K)

G	0	0%
A	0	0%
B	0	0%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60073. Point 260000132. G'stone-Mt Larcom Rd 500m S Auckland Ck.

2.55 km

1.41 km

Start Point 260000130. Hanson Road to Mt Larcom @ Hilderbrand St.

3.26 km

End Point 260000133. Hanson Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-13.80%	-11.56%	-4.46%
A	-16.52%	-12.61%	-4.80%
B	-15.14%	-12.08%	-4.63%

All Vehicles (00)

G	2,592	100%
A	2,425	100%
B	5,017	100%

Light Vehicles (0A)

G	2,113	81.52%
A	1,903	78.47%
B	4,016	80.05%

Heavy Vehicles (0B)

G	479	18.48%
A	522	21.53%
B	1,001	19.95%

Short Vehicles (1A)

G	2,113	81.52%
A	1,903	78.47%
B	4,016	80.05%

Trucks and Buses (1B)

G	251	9.68%
A	309	12.74%
B	560	11.16%

Articulated Vehicles (1C)

G	137	5.29%
A	110	4.54%
B	247	4.92%

Road Trains (1D)

G	91	3.51%
A	103	4.25%
B	194	3.87%

Short 2-Axle Vehicles (2A)

G	2,067	79.75%
A	1,867	76.99%
B	3,934	78.41%

Short Vehicles Towing (2B)

G	46	1.77%
A	36	1.48%
B	82	1.63%

2-Axle Trucks and Buses (2C)

G	193	7.45%
A	251	10.35%
B	444	8.85%

3-Axle Trucks and Buses (2D)

G	45	1.74%
A	45	1.86%
B	90	1.79%

4-Axle Trucks (2E)

G	13	0.50%
A	13	0.54%
B	26	0.52%

3-Axle Articulated (2F)

G	2	0.08%
A	4	0.16%
B	6	0.12%

4-Axle Articulated (2G)

G	4	0.15%
A	4	0.16%
B	8	0.16%

5-Axle Articulated (2H)

G	11	0.42%
A	7	0.29%
B	18	0.36%

6-Axle Articulated (2I)

G	120	4.63%
A	95	3.92%
B	215	4.29%

B Double (2J)

G	90	3.47%
A	103	4.25%
B	193	3.85%

Double Road Trains (2K)

G	1	0.04%
A	0	0.00%
B	1	0.02%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 61052. Point 260000763. G'stone-Mt Larcom Rd 500m S Red Rover Rd.

3.34 km

3.26 km

Start Point 260000133. Hanson Rd.

4.62 km

End Point 260000135. Hanson Rd to Gladstone @ Pwr Stn Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-12.31%	-12.03%	-4.17%
A	-13.58%	-12.07%	-3.94%
B	-12.95%	-12.05%	-4.06%

All Vehicles (00)

G	3,753	100%
A	3,698	100%
B	7,451	100%

Light Vehicles (0A)

G	2,913	77.62%
A	2,936	79.39%
B	5,849	78.50%

Heavy Vehicles (0B)

G	841	22.41%
A	762	20.61%
B	1,603	21.51%

Short Vehicles (1A)

G	2,913	77.62%
A	2,936	79.39%
B	5,849	78.50%

Trucks and Buses (1B)

G	565	15.05%
A	477	12.90%
B	1,042	13.98%

Articulated Vehicles (1C)

G	177	4.72%
A	170	4.60%
B	347	4.66%

Road Trains (1D)

G	99	2.64%
A	115	3.11%
B	214	2.87%

Short 2-Axle Vehicles (2A)

G	2,833	75.49%
A	2,853	77.15%
B	5,686	76.31%

Short Vehicles Towing (2B)

G	80	2.13%
A	83	2.24%
B	163	2.19%

2-Axle Trucks and Buses (2C)

G	465	12.39%
A	388	10.49%
B	853	11.45%

3-Axle Trucks and Buses (2D)

G	78	2.08%
A	69	1.87%
B	147	1.97%

4-Axle Trucks (2E)

G	22	0.59%
A	20	0.54%
B	42	0.56%

3-Axle Articulated (2F)

G	13	0.35%
A	10	0.27%
B	23	0.31%

4-Axle Articulated (2G)

G	11	0.29%
A	7	0.19%
B	18	0.24%

5-Axle Articulated (2H)

G	17	0.45%
A	15	0.41%
B	32	0.43%

6-Axle Articulated (2I)

G	136	3.62%
A	138	3.73%
B	274	3.68%

B Double (2J)

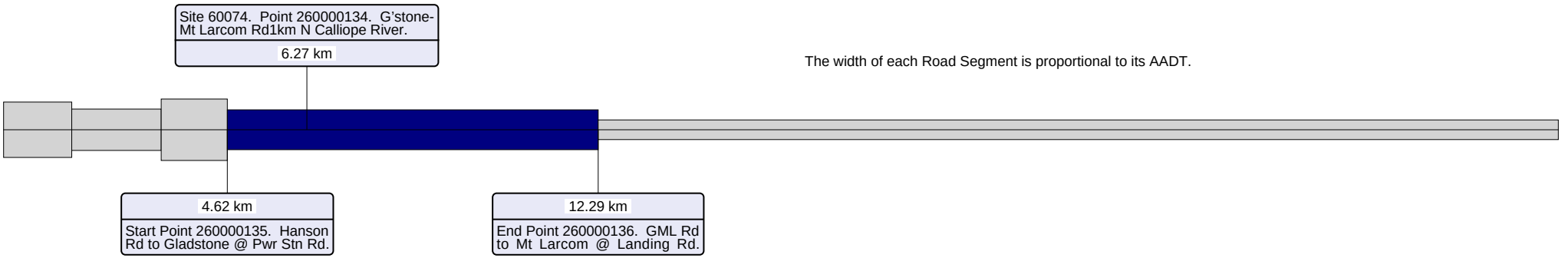
G	98	2.61%
A	114	3.08%
B	212	2.85%

Double Road Trains (2K)

G	1	0.03%
A	1	0.03%
B	2	0.03%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%



The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-1.02%	-11.21%	-3.38%
A	-17.95%	-16.37%	-6.35%
B	-9.58%	-13.76%	-4.84%

All Vehicles (00)

G	2,617	100%
A	2,217	100%
B	4,834	100%

Light Vehicles (0A)

G	2,029	77.53%
A	1,706	76.95%
B	3,735	77.27%

Heavy Vehicles (0B)

G	587	22.43%
A	512	23.09%
B	1,099	22.73%

Short Vehicles (1A)

G	2,029	77.53%
A	1,706	76.95%
B	3,735	77.27%

Trucks and Buses (1B)

G	337	12.88%
A	305	13.76%
B	642	13.28%

Articulated Vehicles (1C)

G	118	4.51%
A	107	4.83%
B	225	4.65%

Road Trains (1D)

G	132	5.04%
A	100	4.51%
B	232	4.80%

Short 2-Axle Vehicles (2A)

G	1,994	76.19%
A	1,670	75.33%
B	3,664	75.80%

Short Vehicles Towing (2B)

G	35	1.34%
A	36	1.62%
B	71	1.47%

2-Axle Trucks and Buses (2C)

G	276	10.55%
A	257	11.59%
B	533	11.03%

3-Axle Trucks and Buses (2D)

G	46	1.76%
A	37	1.67%
B	83	1.72%

4-Axle Trucks (2E)

G	15	0.57%
A	11	0.50%
B	26	0.54%

3-Axle Articulated (2F)

G	6	0.23%
A	4	0.18%
B	10	0.21%

4-Axle Articulated (2G)

G	6	0.23%
A	5	0.23%
B	11	0.23%

5-Axle Articulated (2H)

G	9	0.34%
A	6	0.27%
B	15	0.31%

6-Axle Articulated (2I)

G	97	3.71%
A	92	4.15%
B	189	3.91%

B Double (2J)

G	132	5.04%
A	100	4.51%
B	232	4.80%

Double Road Trains (2K)

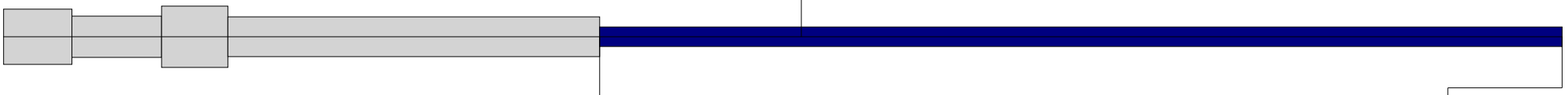
G	0	0%
A	0	0%
B	0	0%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60076. Point 260000138. G'stone-Mt Larcom Rd 150m N Yarwun Rd.
16.45 km

The width of each Road Segment is proportional to its AADT.



12.29 km
Start Point 260000136. GML Rd to Mt Larcom @ Landing Rd.

32.14 km
End Point 260000139. Gladstone-Mt.Larcom Rd @ Bruce Hwy.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-13.18%	-13.70%	-4.53%
A	-12.18%	-13.87%	-4.87%
B	-12.68%	-13.79%	-4.70%

All Vehicles (00)

G	1,179	100%
A	1,204	100%
B	2,383	100%

Light Vehicles (0A)

G	815	69.13%
A	839	69.68%
B	1,654	69.41%

Heavy Vehicles (0B)

G	363	30.79%
A	364	30.23%
B	727	30.51%

Short Vehicles (1A)

G	815	69.13%
A	839	69.68%
B	1,654	69.41%

Trucks and Buses (1B)

G	202	17.13%
A	198	16.45%
B	400	16.79%

Articulated Vehicles (1C)

G	74	6.28%
A	72	5.98%
B	146	6.13%

Road Trains (1D)

G	87	7.38%
A	94	7.81%
B	181	7.60%

Short 2-Axle Vehicles (2A)

G	790	67.01%
A	814	67.61%
B	1,604	67.31%

Short Vehicles Towing (2B)

G	25	2.12%
A	25	2.08%
B	50	2.10%

2-Axle Trucks and Buses (2C)

G	169	14.33%
A	165	13.70%
B	334	14.02%

3-Axle Trucks and Buses (2D)

G	20	1.70%
A	19	1.58%
B	39	1.64%

4-Axle Trucks (2E)

G	13	1.10%
A	14	1.16%
B	27	1.13%

3-Axle Articulated (2F)

G	6	0.51%
A	5	0.42%
B	11	0.46%

4-Axle Articulated (2G)

G	5	0.42%
A	4	0.33%
B	9	0.38%

5-Axle Articulated (2H)

G	6	0.51%
A	5	0.42%
B	11	0.46%

6-Axle Articulated (2I)

G	57	4.83%
A	58	4.82%
B	115	4.83%

B Double (2J)

G	86	7.29%
A	93	7.72%
B	179	7.51%

Double Road Trains (2K)

G	1	0.08%
A	1	0.08%
B	2	0.08%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Report Notes for AADT Segment Analysis Report (Complete)

AADT Segment Report

Provides AADT Segment details for a Road Section together with the traffic flow data collected at the related Site. Traffic data is reported by the start and end Through Distance of the AADT Segments on each section of road. The road segments are represented diagrammatically with AADT data including:

AADT	by direction of traffic flow
VKT	Vehicle Kilometres Travelled
%VC	Percentage Vehicle Class as per the Austroads vehicle classification scheme

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segment

Is a subdivision of a Road Section. The boundaries of an AADT Segment are it's Start Point and End Point (or Start and End Through Distance (TDist)) within the Road Section. These distances are measured in kilometres from the begining of the Road Section in Gazettal Direction. AADT Segments are determined by the traffic volume, collected at a count Site, located within the limits of each AADT Segment.

Annual Segment Growth (when displayed)

A percentage that represents the increase or decrease in AADT for the AADT Segment,using an exponential fit, calculated over a 1, 5 or 10 year period.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Data Year

The most recent year the traffic data was collected for this AADT Segment.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

G	Traffic flowing in Gazettal Direction
A	Traffic flowing against Gazettal Direction
B	The combined traffic flow in both Directions

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site TDist

The Through Distance in gazettal direction from the start of the Road Section at which the site is located.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Through Distance

The distance, in kilometres, from the beginning of the Road Section in Gazettal Direction.

Traffic Class

Is the 12 Austroads vehicle categories or classes into which vehicles are placed or binned. Traffic classes are formed in a hierarchical format.

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A
1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles.

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Vehicle Kilometres Travelled (VKT)

Daily VKT is a measure of the traffic demand. It is calculated by the length of an AADT Segment in kilometres multiplied by its AADT. The yearly VKT is the daily VKT multiplied by 365 days.

AADT Segment Summary - All Vehicles

The Total VKT can be used to gauge the demand on an entire Road Section.

AADT Segment Summary - Heavy Vehicles only

A blank field indicates that vehicle classification data was not collected for this AADT Segment.

Traffic Analysis and Reporting System

AADT Segment Analysis Report (Complete)

Road Section 10E - BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)

Traffic Year 2017

Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	11.445 km	60127	10.000 km	Bruce Hwy 10m N Ginger Beer Ck(Calliope)	2,672	2,711	5,383	11.16208	11.32500	22.48708	2017	2
404	11.445 km	45.420 km	60006	18.105 km	Bruce Hwy 100m S of Calliope River	2,214	2,346	4,560	27.45554	29.09245	56.54799	2017	3
404	45.420 km	85.308 km	60023	53.490 km	Bruce Hwy 100m Sth Hut Ck (Ambrose)	2,728	2,960	5,688	39.71728	43.09500	82.81227	2017	4
404	85.308 km	108.938 km	61551	100.438 km	Bruce Hwy Mikros WiM Site 400m N Bobs Ck	3,060	3,175	6,235	26.39235	27.38422	53.77656	2017	5
404	108.938 km	114.388 km	60130	111.494 km	Bruce Hwy 100m Nth Gavial Ck	2,955	2,842	5,797	5.87823	5.65345	11.53168	2017	6
404	114.388 km	116.961 km	60024	114.500 km	Bruce Hwy 30m North Scrubby Ck	5,575	4,538	10,113	5.23573	4.26184	9.49757	2017	7
404	116.961 km	119.737 km	60868	118.341 km	Bruce Hwy100m N Owald St(Lower Dawson R)	9,565	9,070	18,635	9.69164	9.19009	18.88173	2017	8
404	119.737 km	121.051 km	61086	120.225 km	Bruce Hwy(Gladstone Rd) @ Derby St	10,466	10,476	20,942	5.01960	5.02439	10.04399	2017	9
								Totals	130.55245	135.02643	265.57888		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	11.445 km	60127	10.000 km	Bruce Hwy 10m N Ginger Beer Ck(Calliope)	687	25.71%	685	25.27%	1,372	25.49%	2.86989	2.86154	5.73143	2017	2
404	11.445 km	45.420 km	60006	18.105 km	Bruce Hwy 100m S of Calliope River	653	29.49%	686	29.24%	1,339	29.36%	8.09777	8.50700	16.60477	2017	3
404	45.420 km	85.308 km	60023	53.490 km	Bruce Hwy 100m Sth Hut Ck (Ambrose)	556	20.38%	750	25.34%	1,306	22.96%	8.09487	10.91934	19.01421	2017	4
404	85.308 km	108.938 km	61551	100.438 km	Bruce Hwy Mikros WiM Site 400m N Bobs Ck	903	29.51%	832	26.20%	1,735	27.83%	7.78833	7.17596	14.96429	2017	5
404	108.938 km	114.388 km	60130	111.494 km	Bruce Hwy 100m Nth Gavial Ck	917	31.03%	778	27.38%	1,695	29.24%	1.82414	1.54764	3.37178	2017	6
404	114.388 km	116.961 km	60024	114.500 km	Bruce Hwy 30m North Scrubby Ck	708	12.70%	813	17.92%	1,521	15.04%	0.66491	0.76352	1.42844	2017	7
404	116.961 km	119.737 km	60868	118.341 km	Bruce Hwy100m N Owald St(Lower Dawson R)	1,019	10.65%	960	10.58%	1,979	10.62%	1.03249	0.97271	2.00520	2017	8
404	119.737 km	121.051 km	61086	120.225 km	Bruce Hwy(Gladstone Rd) @ Derby St	1,368	13.07%	1,075	10.26%	2,443	11.67%	0.65611	0.51558	1.17169	2017	9
											Totals	31.02852	33.26329	64.29181		

Site 60127. Point 260000227. 1km Sth Dawson Hwy (Calliope).

10.00 km

The width of each Road Segment is proportional to its AADT.

0.00 km

Start Point 260000228. Bruce Hwy to R'ton @ Gladstone-Benaraby.

11.45 km

End Point 260000014. S.Abut Dawson Hwy Overpass.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.11%	-0.79%	0.68%
A	-0.88%	0.29%	0.92%
B	-0.39%	-0.25%	0.80%

All Vehicles (00)

G	2,672	100%
A	2,711	100%
B	5,383	100%

Light Vehicles (0A)

G	1,985	74.29%
A	2,024	74.66%
B	4,009	74.48%

Heavy Vehicles (0B)

G	687	25.71%
A	685	25.27%
B	1,372	25.49%

Short Vehicles (1A)

G	1,985	74.29%
A	2,024	74.66%
B	4,009	74.48%

Trucks and Buses (1B)

G	322	12.05%
A	279	10.29%
B	601	11.16%

Articulated Vehicles (1C)

G	200	7.49%
A	202	7.45%
B	402	7.47%

Road Trains (1D)

G	165	6.18%
A	204	7.52%
B	369	6.85%

Short 2-Axle Vehicles (2A)

G	1,790	66.99%
A	1,842	67.95%
B	3,632	67.47%

Short Vehicles Towing (2B)

G	195	7.30%
A	182	6.71%
B	377	7.00%

2-Axle Trucks and Buses (2C)

G	278	10.40%
A	237	8.74%
B	515	9.57%

3-Axle Trucks and Buses (2D)

G	34	1.27%
A	33	1.22%
B	67	1.24%

4-Axle Trucks (2E)

G	10	0.37%
A	9	0.33%
B	19	0.35%

3-Axle Articulated (2F)

G	32	1.20%
A	25	0.92%
B	57	1.06%

4-Axle Articulated (2G)

G	43	1.61%
A	32	1.18%
B	75	1.39%

5-Axle Articulated (2H)

G	27	1.01%
A	26	0.96%
B	53	0.98%

6-Axle Articulated (2I)

G	98	3.67%
A	119	4.39%
B	217	4.03%

B Double (2J)

G	162	6.06%
A	201	7.41%
B	363	6.74%

Double Road Trains (2K)

G	3	0.11%
A	3	0.11%
B	6	0.11%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60006. Point 260000013. 25m Nth Calliope River on Bruce Hwy.

18.11 km

The width of each Road Segment is proportional to its AADT.

11.45 km

Start Point 260000014. S.Abut Dawson Hwy Overpass.

45.42 km

End Point 260000015. Bruce Hwy to R'ton @ G'stone-Mt.Larcom Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	1.93%	-0.49%	1.17%
A	2.45%	2.20%	2.58%
B	2.20%	0.85%	1.87%

All Vehicles (00)

G	2,214	100%
A	2,346	100%
B	4,560	100%

Light Vehicles (0A)

G	1,561	70.51%
A	1,660	70.76%
B	3,221	70.64%

Heavy Vehicles (0B)

G	653	29.49%
A	686	29.24%
B	1,339	29.36%

Short Vehicles (1A)

G	1,561	70.51%
A	1,660	70.76%
B	3,221	70.64%

Trucks and Buses (1B)

G	230	10.39%
A	240	10.23%
B	470	10.31%

Articulated Vehicles (1C)

G	189	8.54%
A	198	8.44%
B	387	8.49%

Road Trains (1D)

G	234	10.57%
A	248	10.57%
B	482	10.57%

Short 2-Axle Vehicles (2A)

G	1,364	61.61%
A	1,492	63.60%
B	2,856	62.63%

Short Vehicles Towing (2B)

G	197	8.90%
A	168	7.16%
B	365	8.00%

2-Axle Trucks and Buses (2C)

G	199	8.99%
A	206	8.78%
B	405	8.88%

3-Axle Trucks and Buses (2D)

G	23	1.04%
A	25	1.07%
B	48	1.05%

4-Axle Trucks (2E)

G	8	0.36%
A	9	0.38%
B	17	0.37%

3-Axle Articulated (2F)

G	23	1.04%
A	20	0.85%
B	43	0.94%

4-Axle Articulated (2G)

G	36	1.63%
A	30	1.28%
B	66	1.45%

5-Axle Articulated (2H)

G	28	1.26%
A	26	1.11%
B	54	1.18%

6-Axle Articulated (2I)

G	102	4.61%
A	122	5.20%
B	224	4.91%

B Double (2J)

G	233	10.52%
A	247	10.53%
B	480	10.53%

Double Road Trains (2K)

G	1	0.05%
A	1	0.04%
B	2	0.04%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60023. Point 260000046. Hut Ck (Nth Ambrose)on Bruce Hwy.
53.49 km

The width of each Road Segment is proportional to its AADT.

45.42 km
Start Point 260000015. Bruce Hwy to R'ton @ G'stone-Mt.Larcom Rd.

85.31 km
End Point 260000047. Bruce Hwy to Marmor @ Bajool-Port Alma.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	3.49%	-2.54%	-0.18%
A	8.19%	-0.47%	1.12%
B	5.88%	-1.51%	0.48%

All Vehicles (00)

G	2,728	100%
A	2,960	100%
B	5,688	100%

Light Vehicles (0A)

G	2,173	79.66%
A	2,208	74.59%
B	4,381	77.02%

Heavy Vehicles (0B)

G	556	20.38%
A	750	25.34%
B	1,306	22.96%

Short Vehicles (1A)

G	2,173	79.66%
A	2,208	74.59%
B	4,381	77.02%

Trucks and Buses (1B)

G	190	6.96%
A	338	11.42%
B	528	9.28%

Articulated Vehicles (1C)

G	177	6.49%
A	207	6.99%
B	384	6.75%

Road Trains (1D)

G	189	6.93%
A	205	6.93%
B	394	6.93%

Short 2-Axle Vehicles (2A)

G	1,948	71.41%
A	2,047	69.16%
B	3,995	70.24%

Short Vehicles Towing (2B)

G	225	8.25%
A	161	5.44%
B	386	6.79%

2-Axle Trucks and Buses (2C)

G	152	5.57%
A	286	9.66%
B	438	7.70%

3-Axle Trucks and Buses (2D)

G	30	1.10%
A	44	1.49%
B	74	1.30%

4-Axle Trucks (2E)

G	8	0.29%
A	8	0.27%
B	16	0.28%

3-Axle Articulated (2F)

G	16	0.59%
A	24	0.81%
B	40	0.70%

4-Axle Articulated (2G)

G	26	0.95%
A	31	1.05%
B	57	1.00%

5-Axle Articulated (2H)

G	26	0.95%
A	24	0.81%
B	50	0.88%

6-Axle Articulated (2I)

G	109	4.00%
A	128	4.32%
B	237	4.17%

B Double (2J)

G	187	6.85%
A	204	6.89%
B	391	6.87%

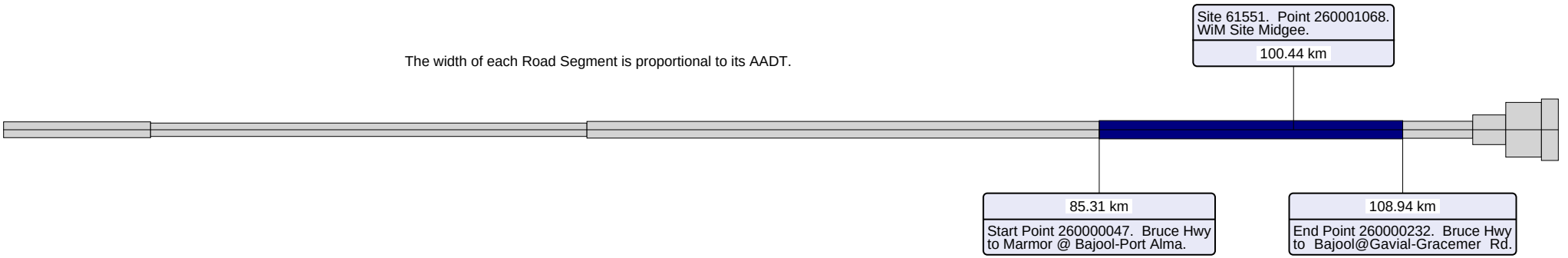
Double Road Trains (2K)

G	2	0.07%
A	1	0.03%
B	3	0.05%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.00%	-0.57%	0.70%
A	10.59%	0.35%	1.17%
B	5.13%	-0.11%	0.94%

All Vehicles (00)

G	3,060	100%
A	3,175	100%
B	6,235	100%

Light Vehicles (0A)

G	2,158	70.52%
A	2,342	73.76%
B	4,500	72.17%

Heavy Vehicles (0B)

G	903	29.51%
A	832	26.20%
B	1,735	27.83%

Short Vehicles (1A)

G	2,158	70.52%
A	2,342	73.76%
B	4,500	72.17%

Trucks and Buses (1B)

G	458	14.97%
A	342	10.77%
B	800	12.83%

Articulated Vehicles (1C)

G	243	7.94%
A	237	7.46%
B	480	7.70%

Road Trains (1D)

G	202	6.60%
A	253	7.97%
B	455	7.30%

Short 2-Axle Vehicles (2A)

G	1,959	64.02%
A	2,143	67.50%
B	4,102	65.79%

Short Vehicles Towing (2B)

G	199	6.50%
A	199	6.27%
B	398	6.38%

2-Axle Trucks and Buses (2C)

G	403	13.17%
A	280	8.82%
B	683	10.95%

3-Axle Trucks and Buses (2D)

G	44	1.44%
A	50	1.57%
B	94	1.51%

4-Axle Trucks (2E)

G	11	0.36%
A	12	0.38%
B	23	0.37%

3-Axle Articulated (2F)

G	42	1.37%
A	22	0.69%
B	64	1.03%

4-Axle Articulated (2G)

G	48	1.57%
A	29	0.91%
B	77	1.23%

5-Axle Articulated (2H)

G	29	0.95%
A	30	0.94%
B	59	0.95%

6-Axle Articulated (2I)

G	124	4.05%
A	156	4.91%
B	280	4.49%

B Double (2J)

G	200	6.54%
A	251	7.91%
B	451	7.23%

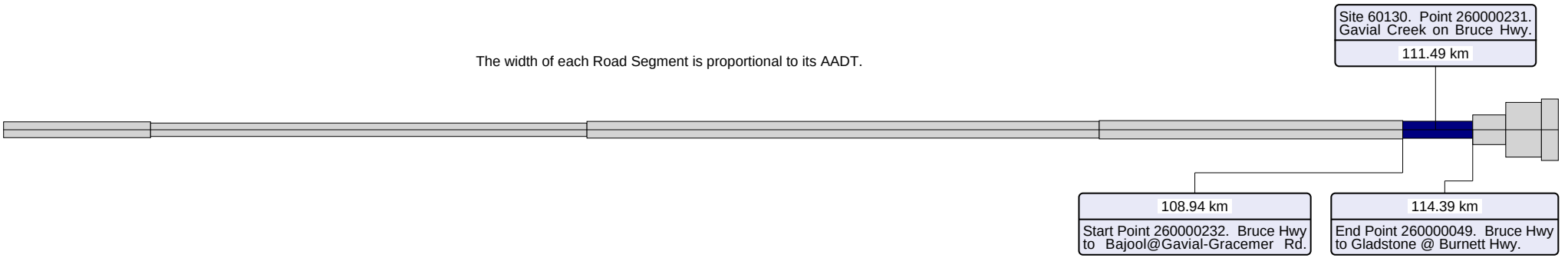
Double Road Trains (2K)

G	2	0.07%
A	2	0.06%
B	4	0.06%

Triple Road Trains (2L)

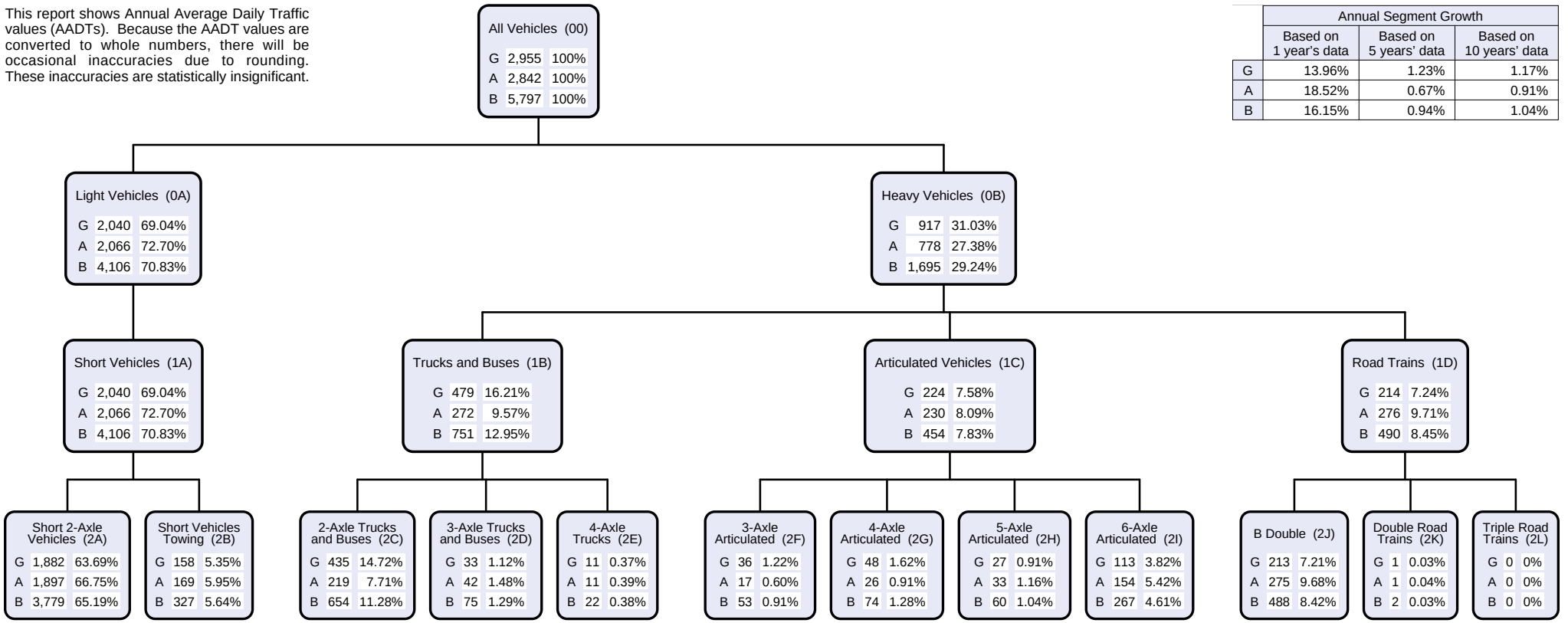
G	0	0%
A	0	0%
B	0	0%

The width of each Road Segment is proportional to its AADT.

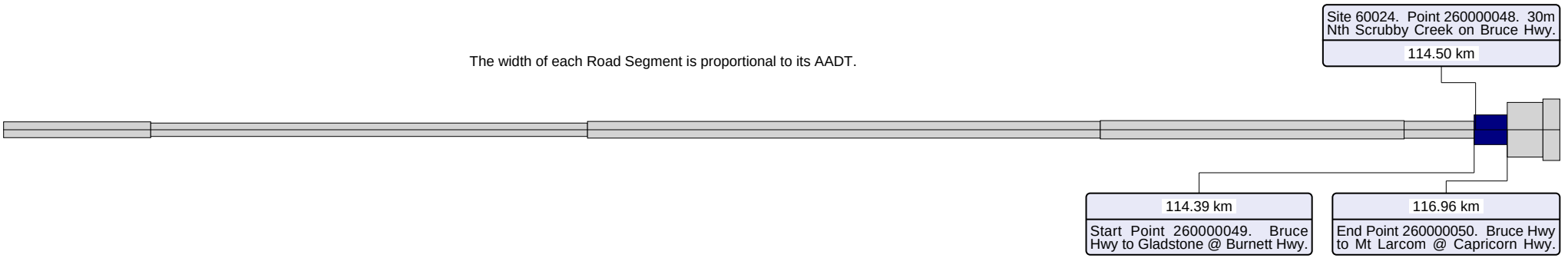


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	13.96%	1.23%	1.17%
A	18.52%	0.67%	0.91%
B	16.15%	0.94%	1.04%

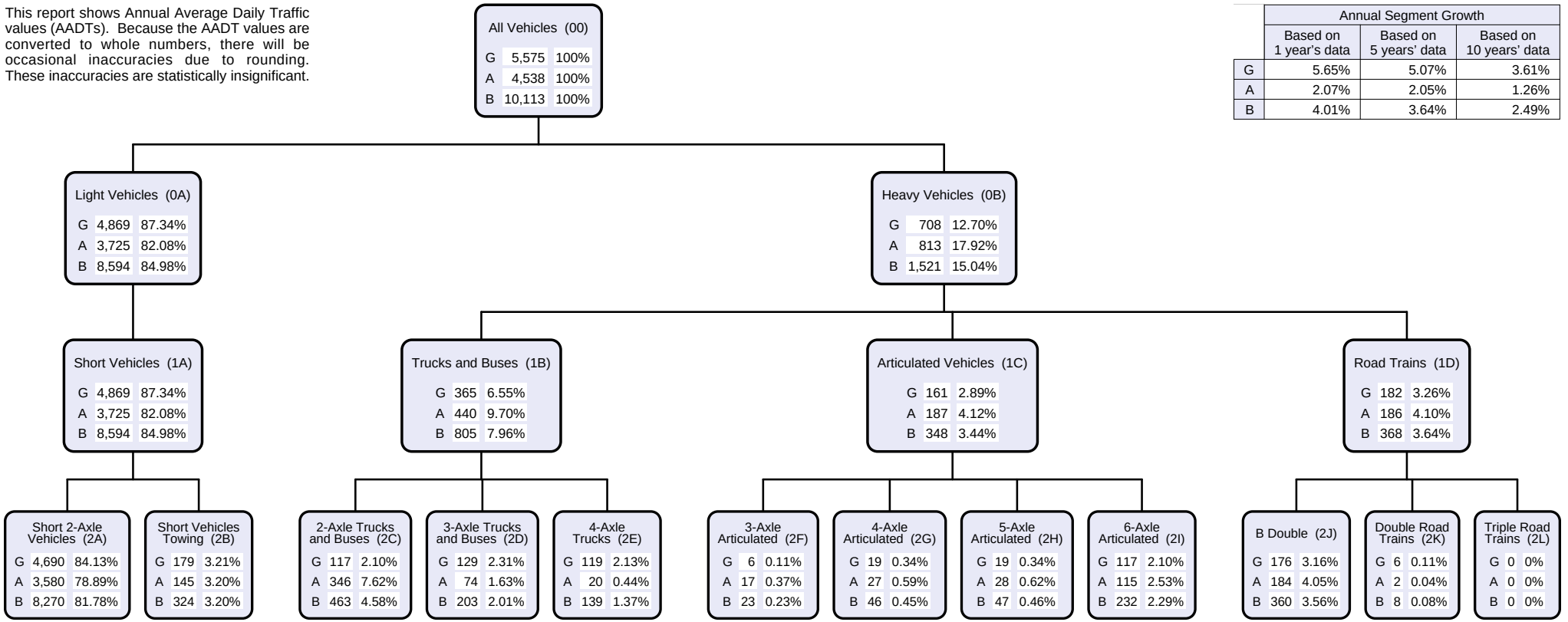


The width of each Road Segment is proportional to its AADT.

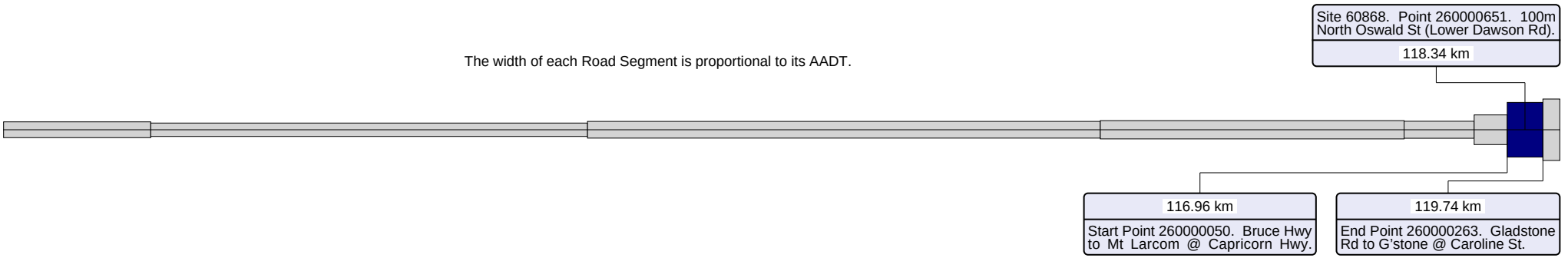


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	5.65%	5.07%	3.61%
A	2.07%	2.05%	1.26%
B	4.01%	3.64%	2.49%



The width of each Road Segment is proportional to its AADT.

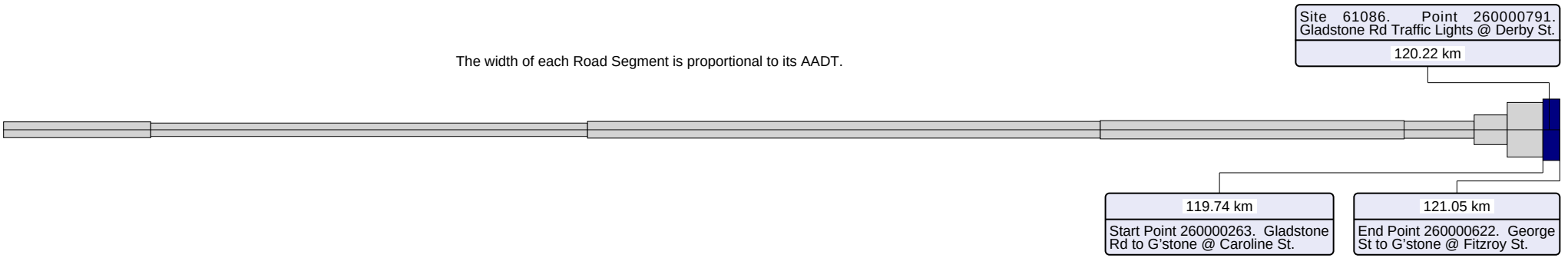


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-7.06%	-5.56%	-2.30%
A	-5.63%	-5.76%	-2.37%
B	-6.37%	-5.66%	-2.33%

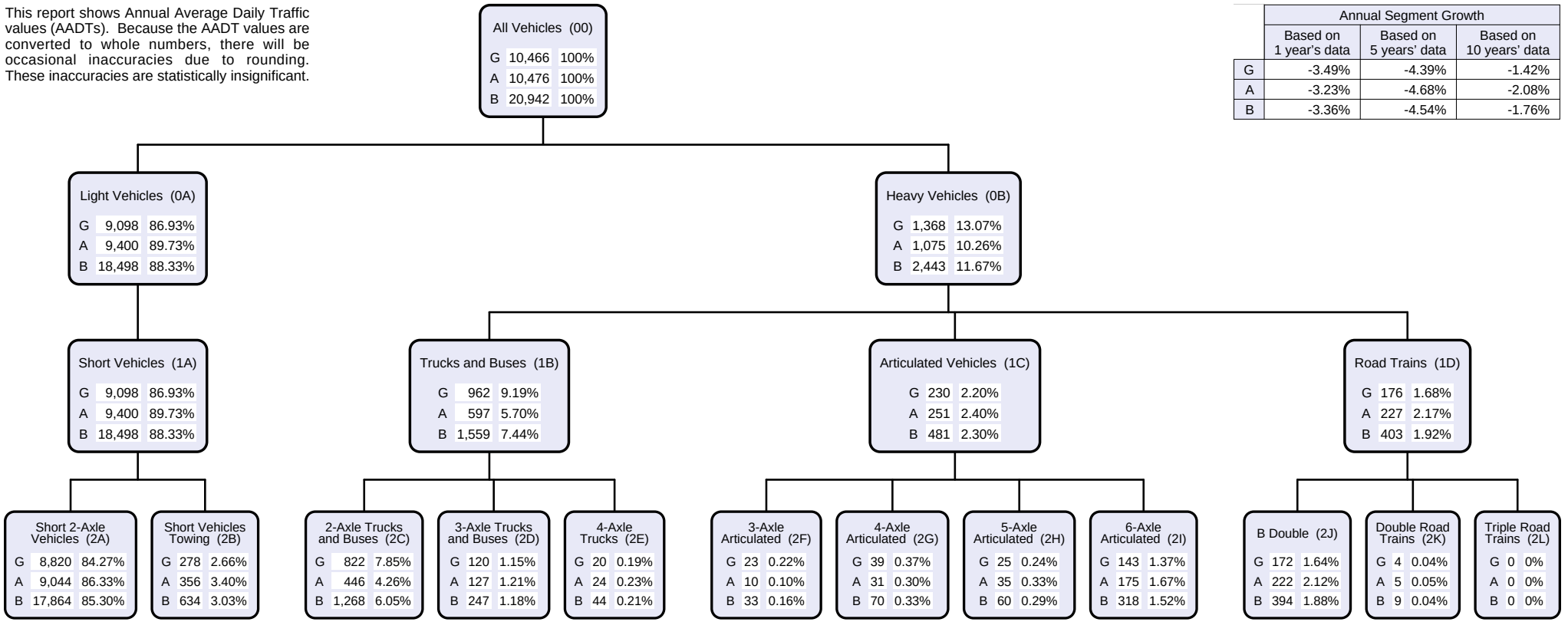
- **All Vehicles (00)**: G 9,565 100% | A 9,070 100% | B 18,635 100%
  - **Light Vehicles (0A)**: G 8,546 89.35% | A 8,110 89.42% | B 16,656 89.38%
    - **Short Vehicles (1A)**: G 8,546 89.35% | A 8,110 89.42% | B 16,656 89.38%
      - **Short 2-Axle Vehicles (2A)**: G 8,244 86.19% | A 7,774 85.71% | B 16,018 85.96%
      - **Short Vehicles Towing (2B)**: G 302 3.16% | A 336 3.70% | B 638 3.42%
  - **Heavy Vehicles (0B)**: G 1,019 10.65% | A 960 10.58% | B 1,979 10.62%
    - **Trucks and Buses (1B)**: G 684 7.15% | A 523 5.77% | B 1,207 6.48%
      - **2-Axle Trucks and Buses (2C)**: G 595 6.22% | A 397 4.38% | B 992 5.32%
      - **3-Axle Trucks and Buses (2D)**: G 73 0.76% | A 102 1.12% | B 175 0.94%
      - **4-Axle Trucks (2E)**: G 16 0.17% | A 24 0.26% | B 40 0.21%
    - **Articulated Vehicles (1C)**: G 177 1.85% | A 227 2.50% | B 404 2.17%
      - **3-Axle Articulated (2F)**: G 20 0.21% | A 11 0.12% | B 31 0.17%
      - **4-Axle Articulated (2G)**: G 32 0.33% | A 32 0.35% | B 64 0.34%
      - **5-Axle Articulated (2H)**: G 19 0.20% | A 30 0.33% | B 49 0.26%
      - **6-Axle Articulated (2I)**: G 106 1.11% | A 154 1.70% | B 260 1.40%
    - **Road Trains (1D)**: G 158 1.65% | A 210 2.32% | B 368 1.97%
      - **B Double (2J)**: G 152 1.59% | A 204 2.25% | B 356 1.91%
      - **Double Road Trains (2K)**: G 6 0.06% | A 6 0.07% | B 12 0.06%
      - **Triple Road Trains (2L)**: G 0 0% | A 0 0% | B 0 0%

The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-3.49%	-4.39%	-1.42%
A	-3.23%	-4.68%	-2.08%
B	-3.36%	-4.54%	-1.76%



Report Notes for AADT Segment Analysis Report (Complete)

AADT Segment Report

Provides AADT Segment details for a Road Section together with the traffic flow data collected at the related Site. Traffic data is reported by the start and end Through Distance of the AADT Segments on each section of road. The road segments are represented diagrammatically with AADT data including:

AADT	by direction of traffic flow
VKT	Vehicle Kilometres Travelled
%VC	Percentage Vehicle Class as per the Austroads vehicle classification scheme

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segment

Is a subdivision of a Road Section. The boundaries of an AADT Segment are it's Start Point and End Point (or Start and End Through Distance (TDist)) within the Road Section. These distances are measured in kilometres from the begining of the Road Section in Gazettal Direction. AADT Segments are determined by the traffic volume, collected at a count Site, located within the limits of each AADT Segment.

Annual Segment Growth (when displayed)

A percentage that represents the increase or decrease in AADT for the AADT Segment,using an exponential fit, calculated over a 1, 5 or 10 year period.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Data Year

The most recent year the traffic data was collected for this AADT Segment.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

G	Traffic flowing in Gazettal Direction
A	Traffic flowing against Gazettal Direction
B	The combined traffic flow in both Directions

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site TDist

The Through Distance in gazettal direction from the start of the Road Section at which the site is located.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Through Distance

The distance, in kilometres, from the beginning of the Road Section in Gazettal Direction.

Traffic Class

Is the 12 Austroads vehicle categories or classes into which vehicles are placed or binned. Traffic classes are formed in a hierarchical format.

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A
1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles.

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Vehicle Kilometres Travelled (VKT)

Daily VKT is a measure of the traffic demand. It is calculated by the length of an AADT Segment in kilometres multiplied by its AADT. The yearly VKT is the daily VKT multiplied by 365 days.

AADT Segment Summary - All Vehicles

The Total VKT can be used to gauge the demand on an entire Road Section.

AADT Segment Summary - Heavy Vehicles only

A blank field indicates that vehicle classification data was not collected for this AADT Segment.

AADT Segment Analysis Report (Complete)

Road Section 16A - CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)

Traffic Year 2017

Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	5.690 km	60039	3.070 km	Capricorn Hwy 1.5Km West Bruce Hwy	9,054	8,948	18,002	18.80380	18.58365	37.38745	2017	2
404	5.690 km	13.367 km	60010	8.690 km	Capricorn Hwy 3km West Gracemere	2,547	2,391	4,938	7.13696	6.69983	13.83679	2017	3
404	13.367 km	17.856 km	61457	14.580 km	Capricorn Hwy WiM Site at Kabra	2,079	2,040	4,119	3.40641	3.34251	6.74892	2017	4
404	17.856 km	51.620 km	60040	44.000 km	Capricorn Hwy 1Km East of Westwood	1,629	1,607	3,236	20.07557	19.80444	39.88001	2017	5
404	51.620 km	73.350 km	60045	64.000 km	Capricorn Hwy at 41 Mile Ck	1,370	1,371	2,741	10.86609	10.87402	21.74010	2017	6
404	73.350 km	106.380 km	150050	92.220 km	Capricorn Hway 300m E of Int 16A/462	1,341	1,302	2,643	16.16703	15.69685	31.86388	2017	7
								Totals	76.45586	75.00130	151.45716		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	5.690 km	60039	3.070 km	Capricorn Hwy 1.5Km West Bruce Hwy	993	10.97%	1,128	12.61%	2,121	11.78%	2.06231	2.34269	4.40500	2017	2
404	5.690 km	13.367 km	60010	8.690 km	Capricorn Hwy 3km West Gracemere	547	21.48%	562	23.50%	1,109	22.46%	1.53275	1.57478	3.10753	2017	3
404	13.367 km	17.856 km	61457	14.580 km	Capricorn Hwy WiM Site at Kabra	566	27.22%	582	28.53%	1,148	27.87%	0.92738	0.95360	1.88098	2017	4
404	17.856 km	51.620 km	60040	44.000 km	Capricorn Hwy 1Km East of Westwood	407	24.98%	411	25.58%	818	25.28%	5.01581	5.06511	10.08092	2017	5
404	51.620 km	73.350 km	60045	64.000 km	Capricorn Hwy at 41 Mile Ck	306	22.34%	356	25.97%	662	24.15%	2.42702	2.82360	5.25062	2017	6
404	73.350 km	106.380 km	150050	92.220 km	Capricorn Hway 300m E of Int 16A/462	348	25.95%	249	19.12%	597	22.59%	4.19547	3.00193	7.19740	2017	7
											Totals	16.16075	15.76170	31.92245		

Site 60039. Point 260000062. Cap Hwy(TC-60039)3Km West of Bruce Hwy.
3.07 km

0.00 km
Start Point 260000063. Capricorn Hwy to Gracemere @ Bruce Hwy.

5.69 km
End Point 260000026. Capricorn Hwy to Duaring@Gavial-G'mere Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	1.81%	0.88%	2.09%
A	3.62%	3.10%	2.56%
B	2.70%	1.93%	2.31%

All Vehicles (00)

G	9,054	100%
A	8,948	100%
B	18,002	100%

Light Vehicles (0A)

G	8,061	89.03%
A	7,819	87.38%
B	15,880	88.21%

Heavy Vehicles (0B)

G	993	10.97%
A	1,128	12.61%
B	2,121	11.78%

Short Vehicles (1A)

G	8,061	89.03%
A	7,819	87.38%
B	15,880	88.21%

Trucks and Buses (1B)

G	699	7.72%
A	820	9.16%
B	1,519	8.44%

Articulated Vehicles (1C)

G	158	1.75%
A	172	1.92%
B	330	1.83%

Road Trains (1D)

G	136	1.50%
A	136	1.52%
B	272	1.51%

Short 2-Axle Vehicles (2A)

G	7,863	86.85%
A	7,635	85.33%
B	15,498	86.09%

Short Vehicles Towing (2B)

G	198	2.19%
A	184	2.06%
B	382	2.12%

2-Axle Trucks and Buses (2C)

G	596	6.58%
A	722	8.07%
B	1,318	7.32%

3-Axle Trucks and Buses (2D)

G	89	0.98%
A	85	0.95%
B	174	0.97%

4-Axle Trucks (2E)

G	14	0.15%
A	13	0.15%
B	27	0.15%

3-Axle Articulated (2F)

G	17	0.19%
A	22	0.25%
B	39	0.22%

4-Axle Articulated (2G)

G	23	0.25%
A	28	0.31%
B	51	0.28%

5-Axle Articulated (2H)

G	14	0.15%
A	14	0.16%
B	28	0.16%

6-Axle Articulated (2I)

G	104	1.15%
A	108	1.21%
B	212	1.18%

B Double (2J)

G	132	1.46%
A	132	1.48%
B	264	1.47%

Double Road Trains (2K)

G	4	0.04%
A	4	0.04%
B	8	0.04%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60010. Point 260000025. Capricorn Hwy(TC-60010)3km W of Gracemere.

8.69 km

The width of each Road Segment is proportional to its AADT.

5.69 km

Start Point 260000026. Capricorn Hwy to Duaring@Gavial-G'mere Rd.

13.37 km

End Point 260000027. Cap Hwy to Duaringa @ E Williams Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	1.72%	-0.84%	0.51%
A	1.14%	-1.60%	-0.14%
B	1.44%	-1.21%	0.19%

All Vehicles (00)

G	2,547	100%
A	2,391	100%
B	4,938	100%

Light Vehicles (0A)

G	2,000	78.52%
A	1,830	76.54%
B	3,830	77.56%

Heavy Vehicles (0B)

G	547	21.48%
A	562	23.50%
B	1,109	22.46%

Short Vehicles (1A)

G	2,000	78.52%
A	1,830	76.54%
B	3,830	77.56%

Trucks and Buses (1B)

G	309	12.13%
A	336	14.05%
B	645	13.06%

Articulated Vehicles (1C)

G	115	4.52%
A	114	4.77%
B	229	4.64%

Road Trains (1D)

G	123	4.83%
A	112	4.68%
B	235	4.76%

Short 2-Axle Vehicles (2A)

G	1,913	75.11%
A	1,750	73.19%
B	3,663	74.18%

Short Vehicles Towing (2B)

G	87	3.42%
A	80	3.35%
B	167	3.38%

2-Axle Trucks and Buses (2C)

G	247	9.70%
A	280	11.71%
B	527	10.67%

3-Axle Trucks and Buses (2D)

G	54	2.12%
A	48	2.01%
B	102	2.07%

4-Axle Trucks (2E)

G	8	0.31%
A	8	0.33%
B	16	0.32%

3-Axle Articulated (2F)

G	10	0.39%
A	11	0.46%
B	21	0.43%

4-Axle Articulated (2G)

G	17	0.67%
A	18	0.75%
B	35	0.71%

5-Axle Articulated (2H)

G	11	0.43%
A	10	0.42%
B	21	0.43%

6-Axle Articulated (2I)

G	77	3.02%
A	75	3.14%
B	152	3.08%

B Double (2J)

G	108	4.24%
A	99	4.14%
B	207	4.19%

Double Road Trains (2K)

G	15	0.59%
A	13	0.54%
B	28	0.57%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 61457. Point 260001013. WiM Site(TC-61457) Kabra.
14.58 km

The width of each Road Segment is proportional to its AADT.

13.37 km
Start Point 260000027. Cap Hwy to Duaringa @ E Williams Rd.

17.86 km
End Point 260000065. Cap Hwy to Duaringa @ Powerstation Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.24%	-2.76%	-0.47%
A	-2.67%	-2.66%	-0.63%
B	-1.22%	-2.72%	-0.55%

All Vehicles (00)

G	2,079	100%
A	2,040	100%
B	4,119	100%

Light Vehicles (0A)

G	1,513	72.78%
A	1,457	71.42%
B	2,970	72.10%

Heavy Vehicles (0B)

G	566	27.22%
A	582	28.53%
B	1,148	27.87%

Short Vehicles (1A)

G	1,513	72.78%
A	1,457	71.42%
B	2,970	72.10%

Trucks and Buses (1B)

G	355	17.08%
A	353	17.30%
B	708	17.19%

Articulated Vehicles (1C)

G	102	4.91%
A	108	5.29%
B	210	5.10%

Road Trains (1D)

G	109	5.24%
A	121	5.93%
B	230	5.58%

Short 2-Axle Vehicles (2A)

G	1,433	68.93%
A	1,369	67.11%
B	2,802	68.03%

Short Vehicles Towing (2B)

G	80	3.85%
A	88	4.31%
B	168	4.08%

2-Axle Trucks and Buses (2C)

G	315	15.15%
A	318	15.59%
B	633	15.37%

3-Axle Trucks and Buses (2D)

G	33	1.59%
A	29	1.42%
B	62	1.51%

4-Axle Trucks (2E)

G	7	0.34%
A	6	0.29%
B	13	0.32%

3-Axle Articulated (2F)

G	14	0.67%
A	16	0.78%
B	30	0.73%

4-Axle Articulated (2G)

G	21	1.01%
A	20	0.98%
B	41	1.00%

5-Axle Articulated (2H)

G	9	0.43%
A	9	0.44%
B	18	0.44%

6-Axle Articulated (2I)

G	58	2.79%
A	63	3.09%
B	121	2.94%

B Double (2J)

G	90	4.33%
A	98	4.80%
B	188	4.56%

Double Road Trains (2K)

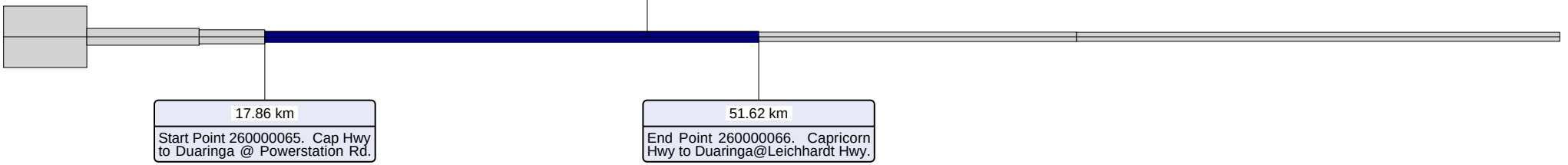
G	19	0.91%
A	23	1.13%
B	42	1.02%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%

Site 60040. Point 260000064. Capricorn Hwy(TC-60040)1Km E of Westwood.
44.00 km

The width of each Road Segment is proportional to its AADT.



17.86 km
Start Point 260000065. Cap Hwy to Duaringa @ Powerstation Rd.

51.62 km
End Point 260000066. Capricorn Hwy to Duaringa@Leichhardt Hwy.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-2.04%	-3.72%	-1.20%
A	-0.86%	-2.32%	-0.59%
B	-1.46%	-3.06%	-0.90%

All Vehicles (00)

G	1,629	100%
A	1,607	100%
B	3,236	100%

Light Vehicles (0A)

G	1,221	74.95%
A	1,196	74.42%
B	2,417	74.69%

Heavy Vehicles (0B)

G	407	24.98%
A	411	25.58%
B	818	25.28%

Short Vehicles (1A)

G	1,221	74.95%
A	1,196	74.42%
B	2,417	74.69%

Trucks and Buses (1B)

G	232	14.24%
A	205	12.76%
B	437	13.50%

Articulated Vehicles (1C)

G	76	4.67%
A	81	5.04%
B	157	4.85%

Road Trains (1D)

G	99	6.08%
A	125	7.78%
B	224	6.92%

Short 2-Axle Vehicles (2A)

G	1,163	71.39%
A	1,133	70.50%
B	2,296	70.95%

Short Vehicles Towing (2B)

G	58	3.56%
A	63	3.92%
B	121	3.74%

2-Axle Trucks and Buses (2C)

G	197	12.09%
A	177	11.01%
B	374	11.56%

3-Axle Trucks and Buses (2D)

G	29	1.78%
A	23	1.43%
B	52	1.61%

4-Axle Trucks (2E)

G	6	0.37%
A	5	0.31%
B	11	0.34%

3-Axle Articulated (2F)

G	10	0.61%
A	8	0.50%
B	18	0.56%

4-Axle Articulated (2G)

G	14	0.86%
A	13	0.81%
B	27	0.83%

5-Axle Articulated (2H)

G	6	0.37%
A	6	0.37%
B	12	0.37%

6-Axle Articulated (2I)

G	46	2.82%
A	54	3.36%
B	100	3.09%

B Double (2J)

G	75	4.60%
A	98	6.10%
B	173	5.35%

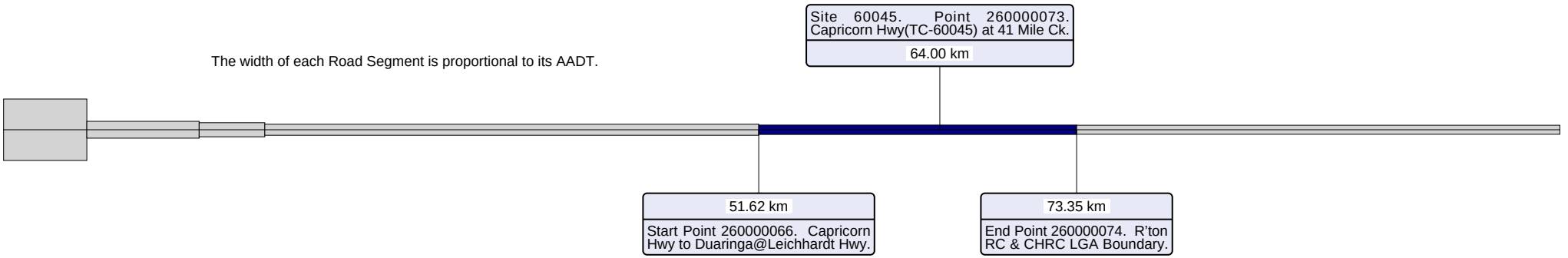
Double Road Trains (2K)

G	23	1.41%
A	27	1.68%
B	50	1.55%

Triple Road Trains (2L)

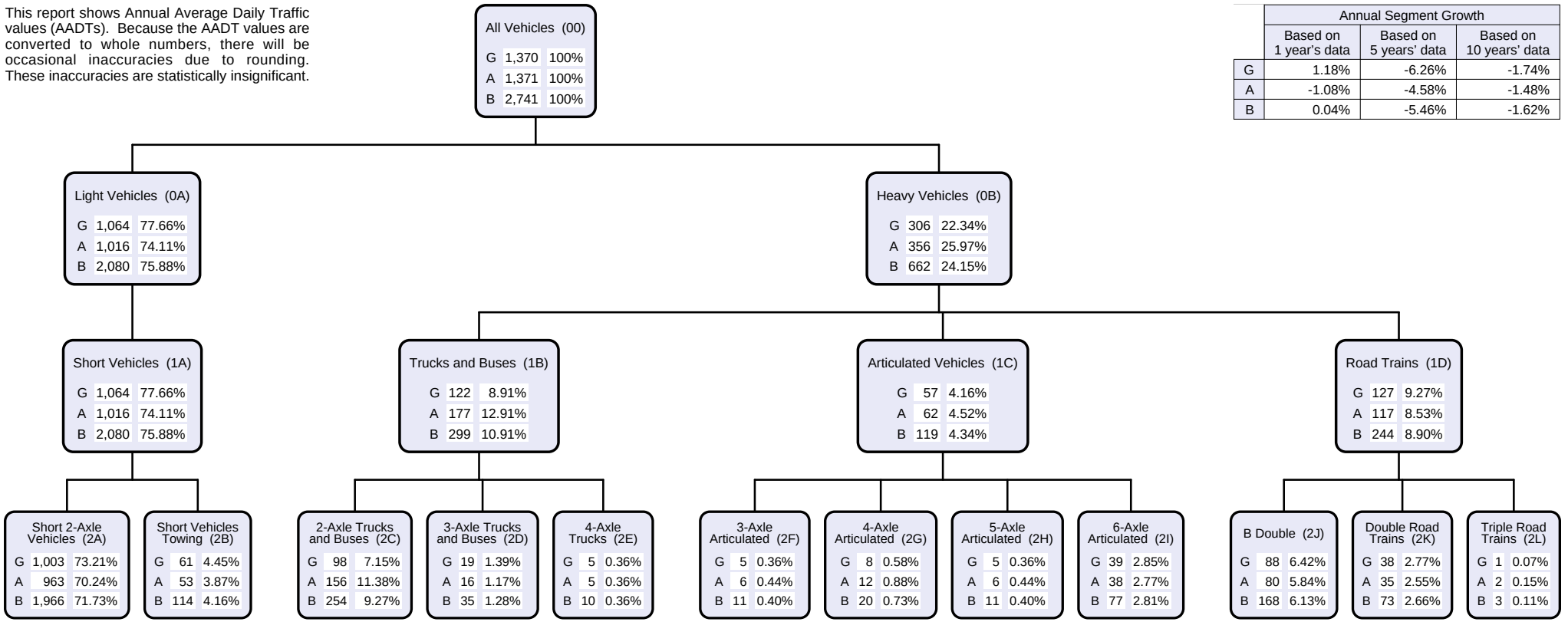
G	1	0.06%
A	0	0.00%
B	1	0.03%

The width of each Road Segment is proportional to its AADT.



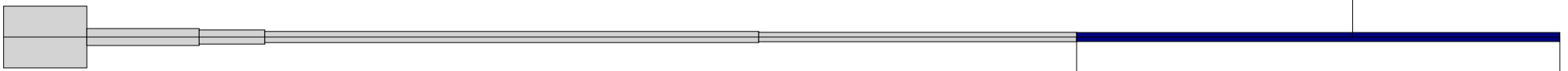
This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	1.18%	-6.26%	-1.74%
A	-1.08%	-4.58%	-1.48%
B	0.04%	-5.46%	-1.62%



Site 150050. Point 350001052. Capricorn Hway 300m E of Int 16A/462.
92.22 km

The width of each Road Segment is proportional to its AADT.



73.35 km
Start Point 350000069. CHRC / Rockhampton Regional Council Boundary.

106.38 km
End Point 350000070. Int Capricorn Hwy & Duaringa Connection Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	3.39%	-4.64%	-1.02%
A	-14.40%	-5.83%	-1.13%
B	-6.21%	-5.24%	-1.08%

All Vehicles (00)

G	1,341	100%
A	1,302	100%
B	2,643	100%

Light Vehicles (0A)

G	995	74.20%
A	1,053	80.88%
B	2,048	77.49%

Heavy Vehicles (0B)

G	348	25.95%
A	249	19.12%
B	597	22.59%

Short Vehicles (1A)

G	995	74.20%
A	1,053	80.88%
B	2,048	77.49%

Trucks and Buses (1B)

G	174	12.98%
A	94	7.22%
B	268	10.14%

Articulated Vehicles (1C)

G	62	4.62%
A	53	4.07%
B	115	4.35%

Road Trains (1D)

G	112	8.35%
A	102	7.83%
B	214	8.10%

Short 2-Axle Vehicles (2A)

G	938	69.95%
A	995	76.42%
B	1,933	73.14%

Short Vehicles Towing (2B)

G	57	4.25%
A	58	4.45%
B	115	4.35%

2-Axle Trucks and Buses (2C)

G	150	11.19%
A	69	5.30%
B	219	8.29%

3-Axle Trucks and Buses (2D)

G	19	1.42%
A	20	1.54%
B	39	1.48%

4-Axle Trucks (2E)

G	5	0.37%
A	5	0.38%
B	10	0.38%

3-Axle Articulated (2F)

G	7	0.52%
A	3	0.23%
B	10	0.38%

4-Axle Articulated (2G)

G	10	0.75%
A	7	0.54%
B	17	0.64%

5-Axle Articulated (2H)

G	5	0.37%
A	4	0.31%
B	9	0.34%

6-Axle Articulated (2I)

G	40	2.98%
A	39	3.00%
B	79	2.99%

B Double (2J)

G	79	5.89%
A	73	5.61%
B	152	5.75%

Double Road Trains (2K)

G	32	2.39%
A	29	2.23%
B	61	2.31%

Triple Road Trains (2L)

G	1	0.07%
A	0	0.00%
B	1	0.04%

Report Notes for AADT Segment Analysis Report (Complete)

AADT Segment Report

Provides AADT Segment details for a Road Section together with the traffic flow data collected at the related Site. Traffic data is reported by the start and end Through Distance of the AADT Segments on each section of road. The road segments are represented diagrammatically with AADT data including:

AADT	by direction of traffic flow
VKT	Vehicle Kilometres Travelled
%VC	Percentage Vehicle Class as per the Austroads vehicle classification scheme

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segment

Is a subdivision of a Road Section. The boundaries of an AADT Segment are it's Start Point and End Point (or Start and End Through Distance (TDist)) within the Road Section. These distances are measured in kilometres from the begining of the Road Section in Gazettal Direction. AADT Segments are determined by the traffic volume, collected at a count Site, located within the limits of each AADT Segment.

Annual Segment Growth (when displayed)

A percentage that represents the increase or decrease in AADT for the AADT Segment,using an exponential fit, calculated over a 1, 5 or 10 year period.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Data Year

The most recent year the traffic data was collected for this AADT Segment.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

G	Traffic flowing in Gazettal Direction
A	Traffic flowing against Gazettal Direction
B	The combined traffic flow in both Directions

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site TDist

The Through Distance in gazettal direction from the start of the Road Section at which the site is located.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Through Distance

The distance, in kilometres, from the beginning of the Road Section in Gazettal Direction.

Traffic Class

Is the 12 Austroads vehicle categories or classes into which vehicles are placed or binned. Traffic classes are formed in a hierarchical format.

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A
1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles.

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Vehicle Kilometres Travelled (VKT)

Daily VKT is a measure of the traffic demand. It is calculated by the length of an AADT Segment in kilometres multiplied by its AADT. The yearly VKT is the daily VKT multiplied by 365 days.

AADT Segment Summary - All Vehicles

The Total VKT can be used to gauge the demand on an entire Road Section.

AADT Segment Summary - Heavy Vehicles only

A blank field indicates that vehicle classification data was not collected for this AADT Segment.

Traffic Analysis and Reporting System

AADT Segment Analysis Report (Complete)

Road Section 16B - CAPRICORN HIGHWAY (DUARINGA - EMERALD)

Traffic Year 2017

Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	36.040 km	150018	22.850 km	5km East of Bridgewater Ck	1,191	1,241	2,432	15.66713	16.32486	31.99199	2017	2
404	36.040 km	82.671 km	159727	77.250 km	Capricorn Hwy 2.4km W Yarrabee Mine Rd	1,226	1,249	2,475	20.86691	21.25837	42.12528	2017	3
404	82.671 km	86.150 km	159676	84.235 km	Capricorn Hwy 200m W of Int 16B/469	1,771	1,865	3,636	2.24888	2.36824	4.61712	2017	4
404	86.150 km	90.560 km	159701	89.410 km	Cap Hwy 1km W of Blackwater Mine CHPP	1,156	1,165	2,321	1.86076	1.87524	3.73600	2017	5
404	90.560 km	127.950 km	159648	120.653 km	Capricorn Hwy 50m W of Comet River	1,120	1,135	2,255	15.28503	15.48974	30.77477	2017	6
404	127.950 km	157.560 km	150024	150.000 km	Capricorn Hwy 400m W of Foley Rd	1,242	1,246	2,488	13.42310	13.46633	26.88943	2017	7
404	157.560 km	158.950 km	159697	157.840 km	Capricorn Hwy 200m W of Codenwarra Rd	4,227	3,609	7,836	2.14457	1.83103	3.97559	2017	8
404	158.950 km	159.550 km	159698	159.250 km	Capricorn Hwy 70m W Borilla St(Emerald)	4,178	4,621	8,799	0.91498	1.01200	1.92698	2017	9
								Totals	72.41135	73.62582	146.03717		

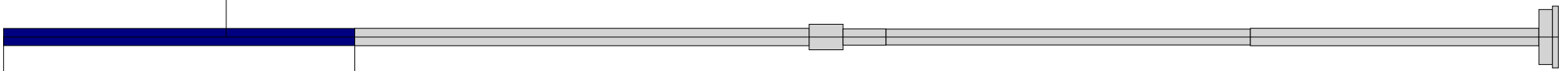
Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	36.040 km	150018	22.850 km	5km East of Bridgewater Ck	311	26.11%	265	21.35%	576	23.68%	4.09108	3.48597	7.57705	2017	2
404	36.040 km	82.671 km	159727	77.250 km	Capricorn Hwy 2.4km W Yarrabee Mine Rd	377	30.75%	229	18.33%	606	24.48%	6.41666	3.89765	10.31431	2017	3
404	82.671 km	86.150 km	159676	84.235 km	Capricorn Hwy 200m W of Int 16B/469	359	20.27%	375	20.11%	734	20.19%	0.45587	0.47619	0.93206	2017	4
404	86.150 km	90.560 km	159701	89.410 km	Cap Hwy 1km W of Blackwater Mine CHPP	202	17.47%	235	20.17%	437	18.83%	0.32515	0.37827	0.70342	2017	5
404	90.560 km	127.950 km	159648	120.653 km	Capricorn Hwy 50m W of Comet River	233	20.80%	215	18.94%	448	19.87%	3.17983	2.93418	6.11401	2017	6
404	127.950 km	157.560 km	150024	150.000 km	Capricorn Hwy 400m W of Foley Rd	453	36.47%	292	23.43%	745	29.94%	4.89587	3.15583	8.05170	2017	7
404	157.560 km	158.950 km	159697	157.840 km	Capricorn Hwy 200m W of Codenwarra Rd	796	18.83%	327	9.06%	1,123	14.33%	0.40385	0.16590	0.56975	2017	8
404	158.950 km	159.550 km	159698	159.250 km	Capricorn Hwy 70m W Borilla St(Emerald)	275	6.58%	394	8.53%	669	7.60%	0.06023	0.08629	0.14651	2017	9
											Totals	19.82853	14.58028	34.40881		

Site 150018. Point 350017703. 5km East of Bridgewater Ck.
22.85 km

The width of each Road Segment is proportional to its AADT.



0.00 km
Start Point 350000048. Int Capricorn Hwy & Duaringa Connection Rd.

36.04 km
End Point 350000049. Cap Hwy To Emerald @ Fitzroy Dev Rd(85C).

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-10.25%	-6.63%	-2.70%
A	-5.41%	-5.09%	-1.86%
B	-7.84%	-5.86%	-2.28%

All Vehicles (00)

G	1,191	100%
A	1,241	100%
B	2,432	100%

Light Vehicles (0A)

G	879	73.80%
A	976	78.65%
B	1,855	76.27%

Heavy Vehicles (0B)

G	311	26.11%
A	265	21.35%
B	576	23.68%

Short Vehicles (1A)

G	879	73.80%
A	976	78.65%
B	1,855	76.27%

Trucks and Buses (1B)

G	133	11.17%
A	84	6.77%
B	217	8.92%

Articulated Vehicles (1C)

G	55	4.62%
A	53	4.27%
B	108	4.44%

Road Trains (1D)

G	123	10.33%
A	128	10.31%
B	251	10.32%

Short 2-Axle Vehicles (2A)

G	827	69.44%
A	918	73.97%
B	1,745	71.75%

Short Vehicles Towing (2B)

G	52	4.37%
A	58	4.67%
B	110	4.52%

2-Axle Trucks and Buses (2C)

G	110	9.24%
A	63	5.08%
B	173	7.11%

3-Axle Trucks and Buses (2D)

G	18	1.51%
A	16	1.29%
B	34	1.40%

4-Axle Trucks (2E)

G	5	0.42%
A	5	0.40%
B	10	0.41%

3-Axle Articulated (2F)

G	5	0.42%
A	3	0.24%
B	8	0.33%

4-Axle Articulated (2G)

G	9	0.76%
A	6	0.48%
B	15	0.62%

5-Axle Articulated (2H)

G	5	0.42%
A	6	0.48%
B	11	0.45%

6-Axle Articulated (2I)

G	36	3.02%
A	38	3.06%
B	74	3.04%

B Double (2J)

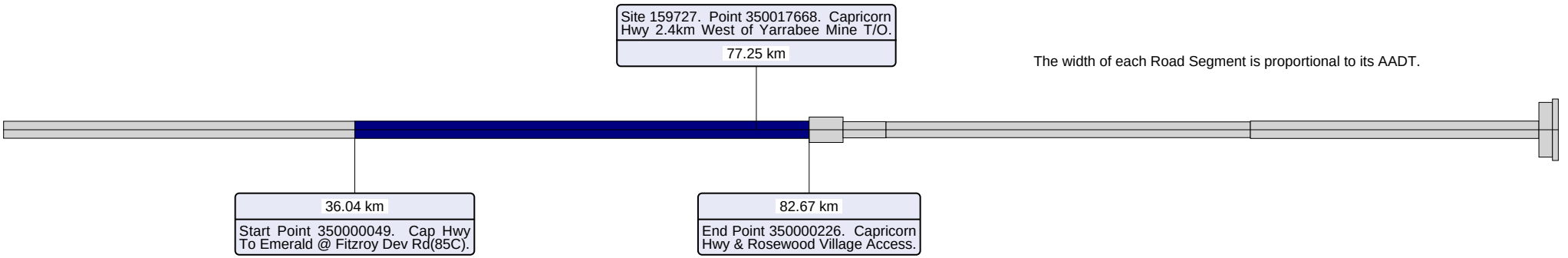
G	83	6.97%
A	85	6.85%
B	168	6.91%

Double Road Trains (2K)

G	39	3.27%
A	42	3.38%
B	81	3.33%

Triple Road Trains (2L)

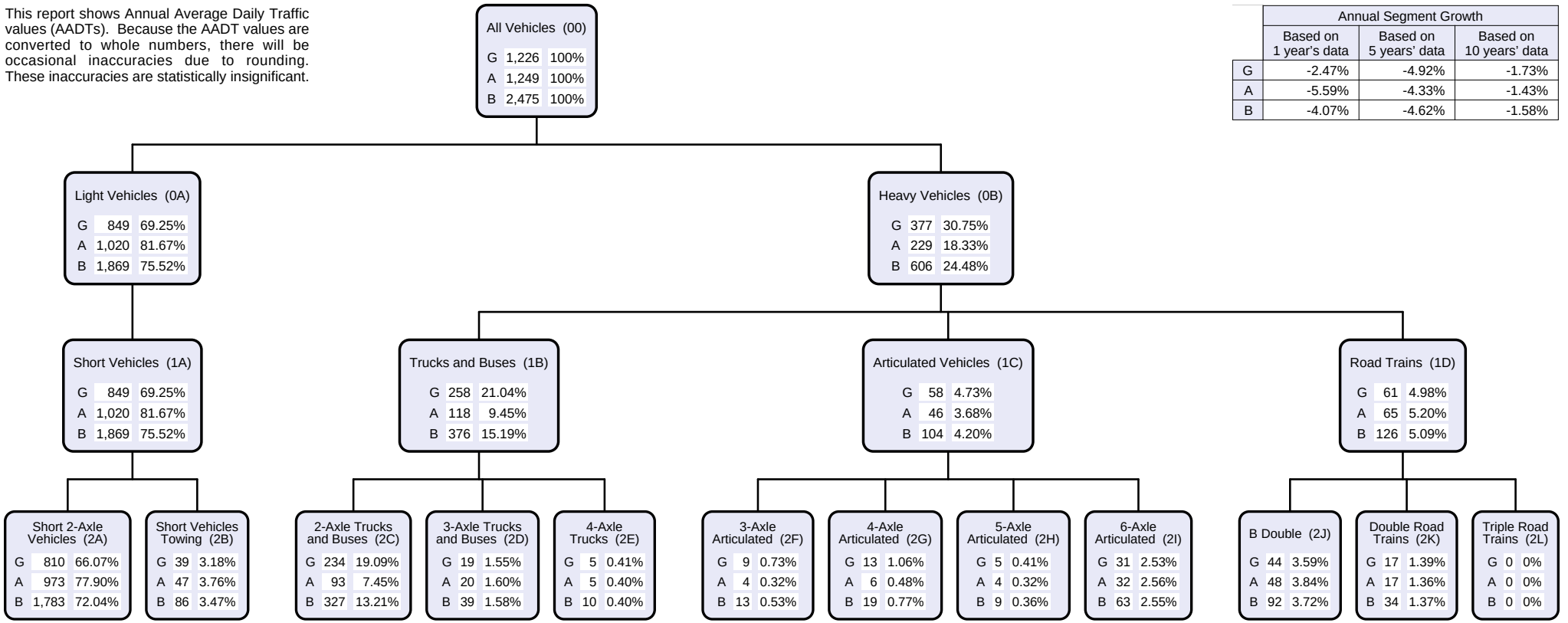
G	1	0.08%
A	1	0.08%
B	2	0.08%



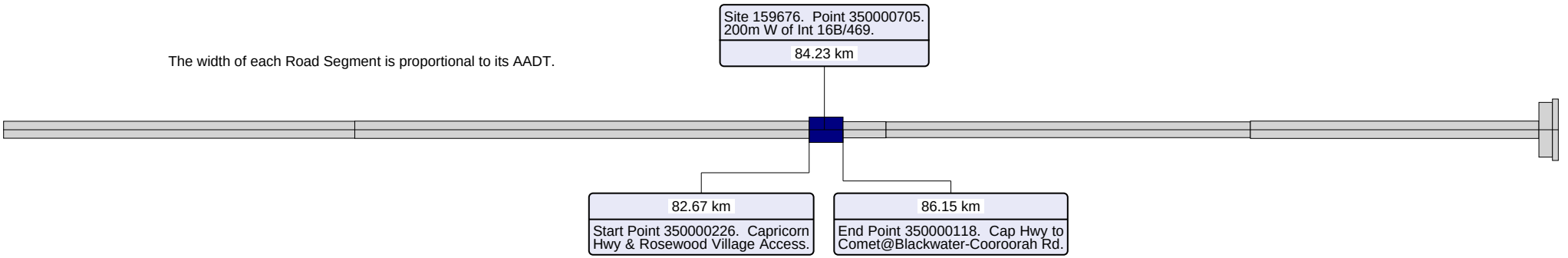
The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-2.47%	-4.92%	-1.73%
A	-5.59%	-4.33%	-1.43%
B	-4.07%	-4.62%	-1.58%

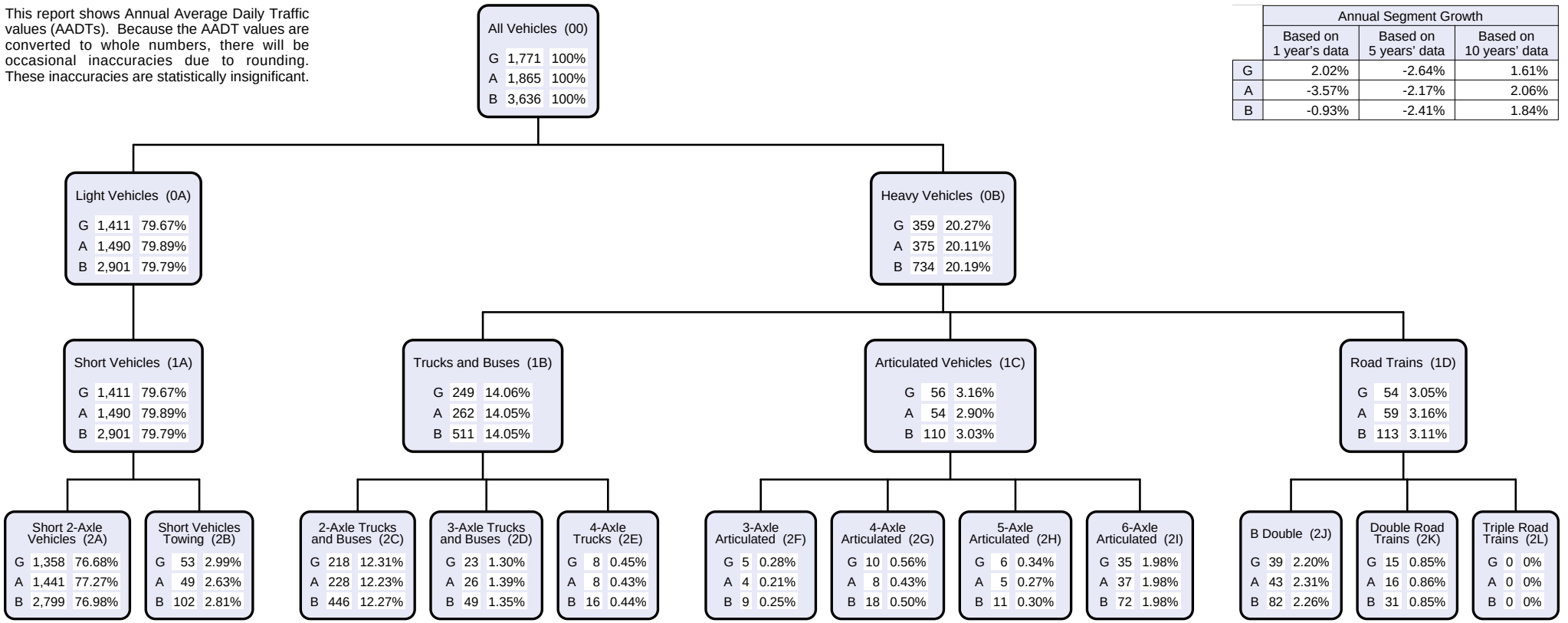


The width of each Road Segment is proportional to its AADT.

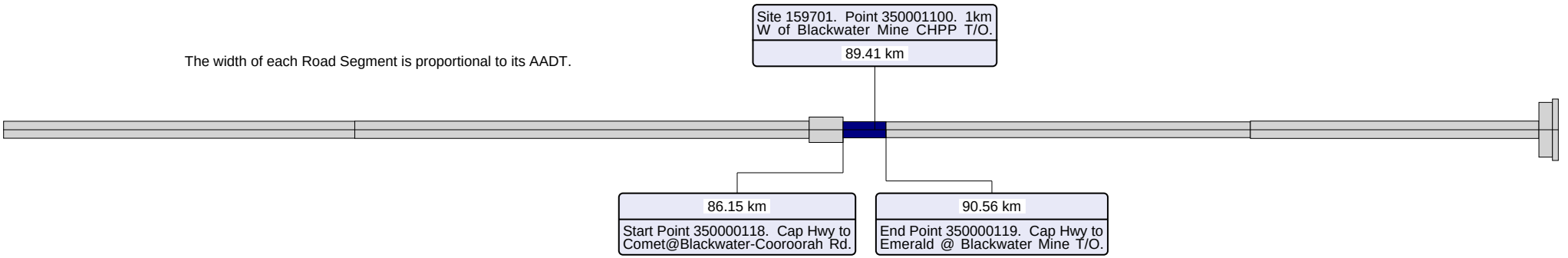


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	2.02%	-2.64%	1.61%
A	-3.57%	-2.17%	2.06%
B	-0.93%	-2.41%	1.84%

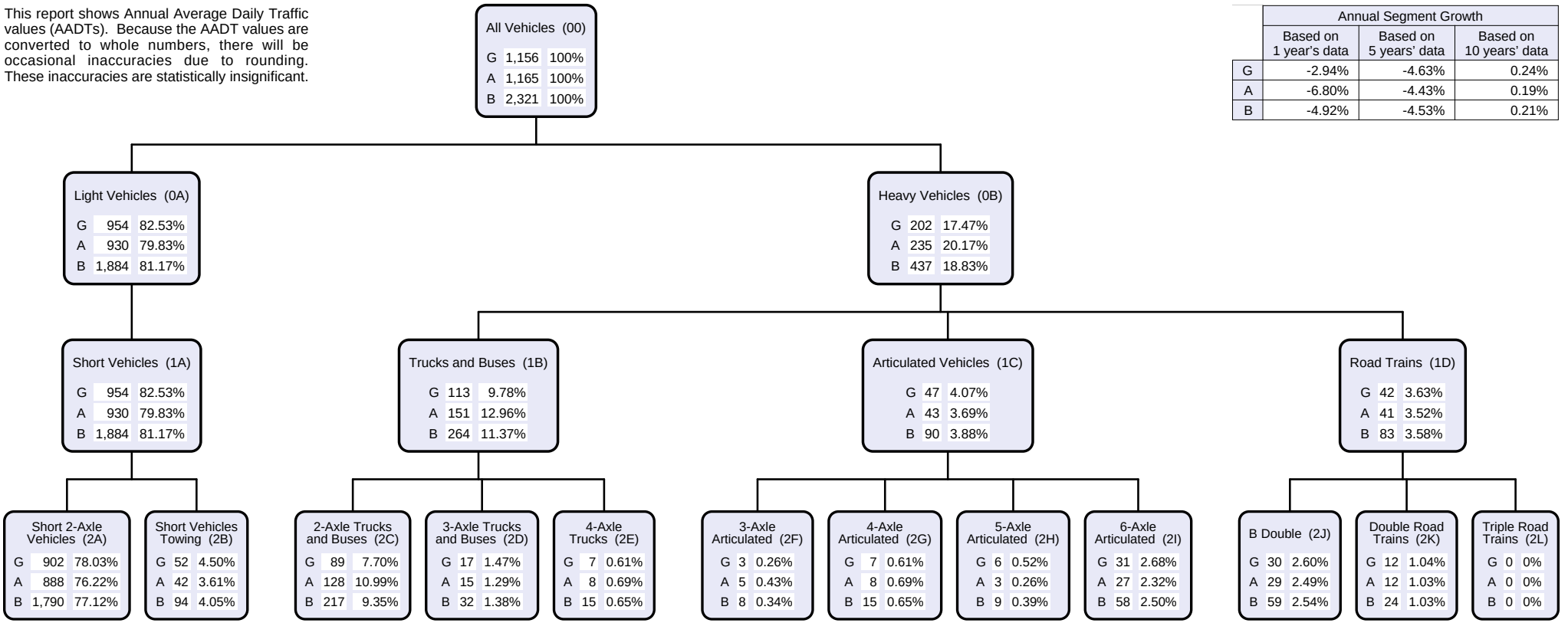


The width of each Road Segment is proportional to its AADT.

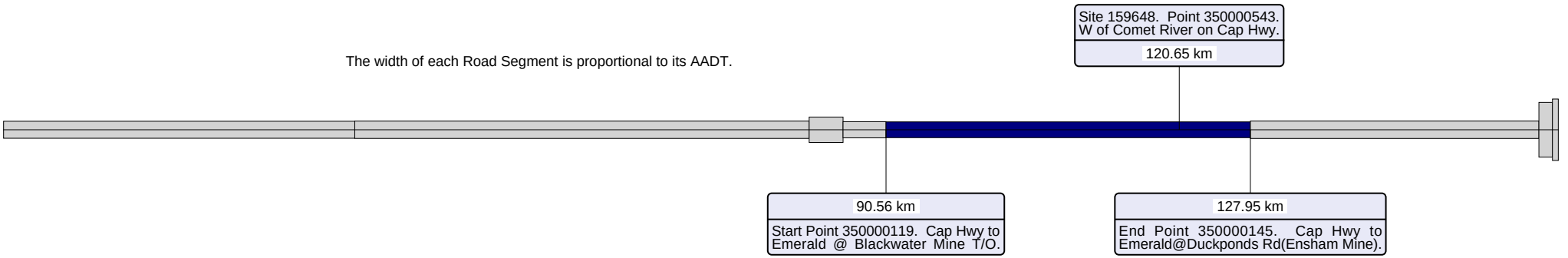


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-2.94%	-4.63%	0.24%
A	-6.80%	-4.43%	0.19%
B	-4.92%	-4.53%	0.21%

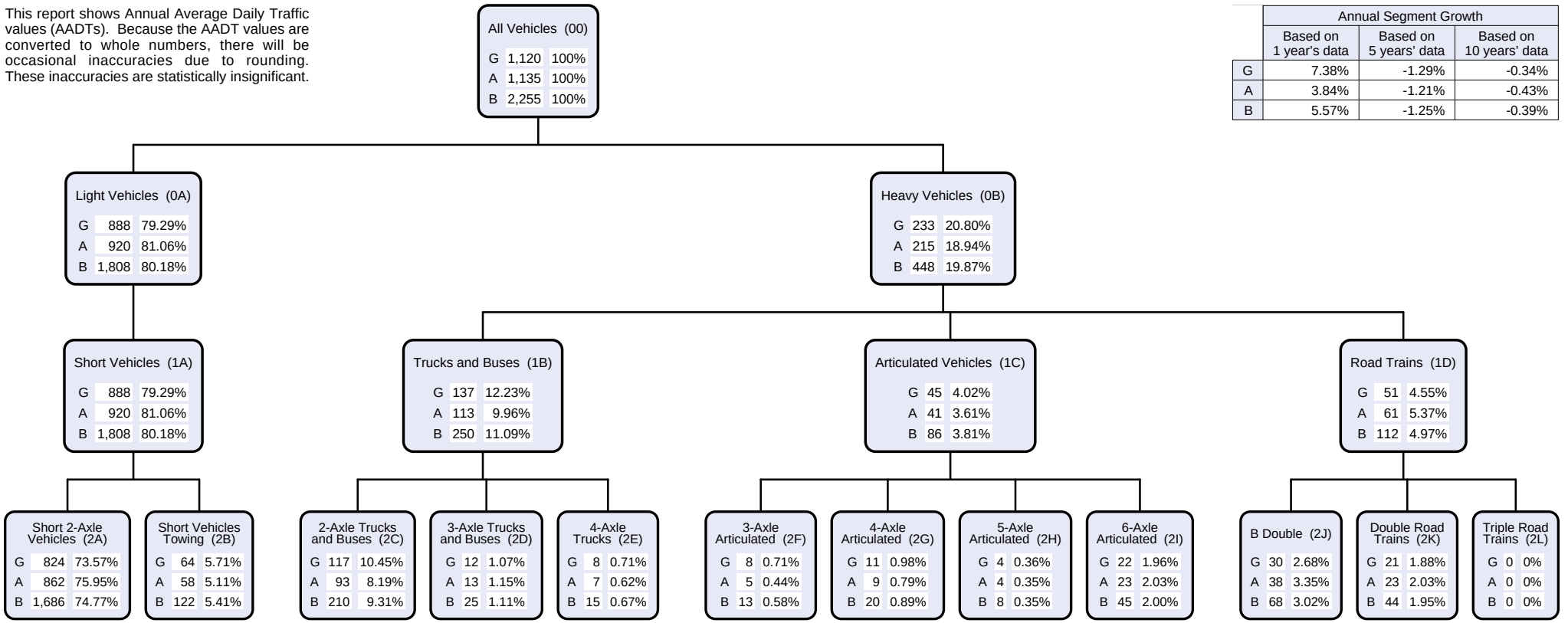


The width of each Road Segment is proportional to its AADT.

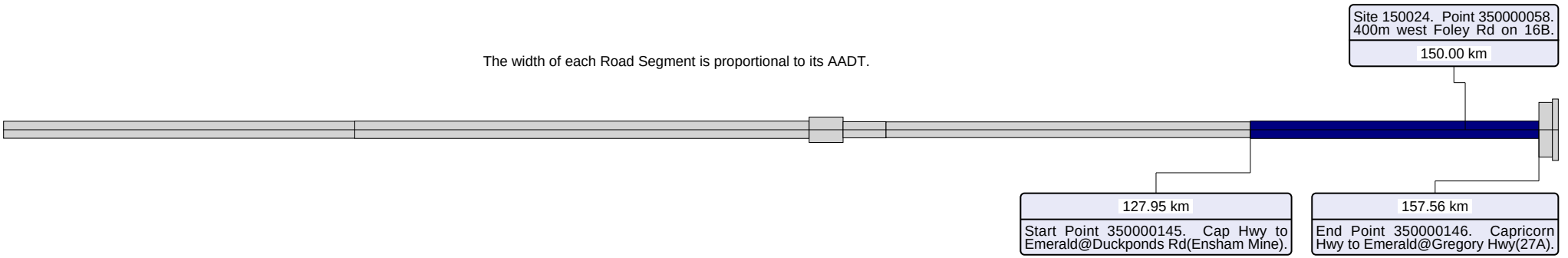


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	7.38%	-1.29%	-0.34%
A	3.84%	-1.21%	-0.43%
B	5.57%	-1.25%	-0.39%



The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-7.31%	-6.10%	-3.27%
A	-5.53%	-5.68%	-3.17%
B	-6.43%	-5.89%	-3.22%

All Vehicles (00)

G	1,242	100%
A	1,246	100%
B	2,488	100%

Light Vehicles (0A)

G	788	63.45%
A	953	76.48%
B	1,741	69.98%

Heavy Vehicles (0B)

G	453	36.47%
A	292	23.43%
B	745	29.94%

Short Vehicles (1A)

G	788	63.45%
A	953	76.48%
B	1,741	69.98%

Trucks and Buses (1B)

G	341	27.46%
A	193	15.49%
B	534	21.46%

Articulated Vehicles (1C)

G	68	5.48%
A	53	4.25%
B	121	4.86%

Road Trains (1D)

G	44	3.54%
A	46	3.69%
B	90	3.62%

Short 2-Axle Vehicles (2A)

G	750	60.39%
A	909	72.95%
B	1,659	66.68%

Short Vehicles Towing (2B)

G	38	3.06%
A	44	3.53%
B	82	3.30%

2-Axle Trucks and Buses (2C)

G	311	25.04%
A	161	12.92%
B	472	18.97%

3-Axle Trucks and Buses (2D)

G	19	1.53%
A	23	1.85%
B	42	1.69%

4-Axle Trucks (2E)

G	11	0.89%
A	9	0.72%
B	20	0.80%

3-Axle Articulated (2F)

G	12	0.97%
A	6	0.48%
B	18	0.72%

4-Axle Articulated (2G)

G	20	1.61%
A	12	0.96%
B	32	1.29%

5-Axle Articulated (2H)

G	4	0.32%
A	4	0.32%
B	8	0.32%

6-Axle Articulated (2I)

G	32	2.58%
A	31	2.49%
B	63	2.53%

B Double (2J)

G	27	2.17%
A	30	2.41%
B	57	2.29%

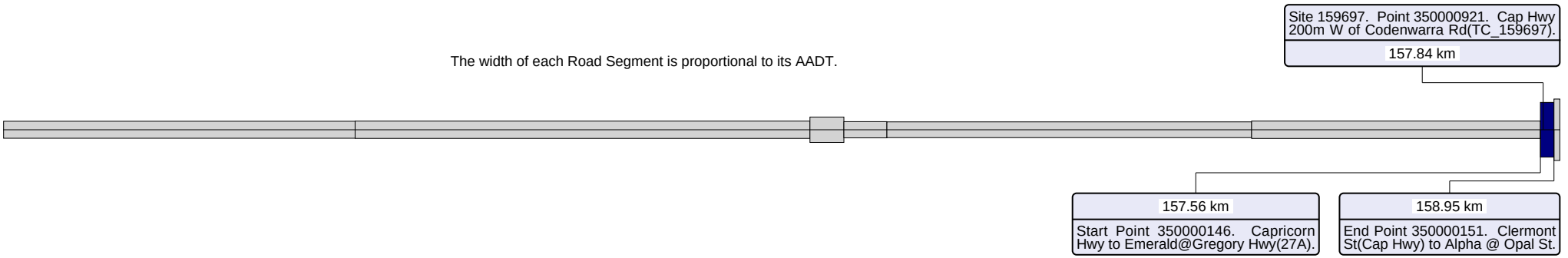
Double Road Trains (2K)

G	17	1.37%
A	16	1.28%
B	33	1.33%

Triple Road Trains (2L)

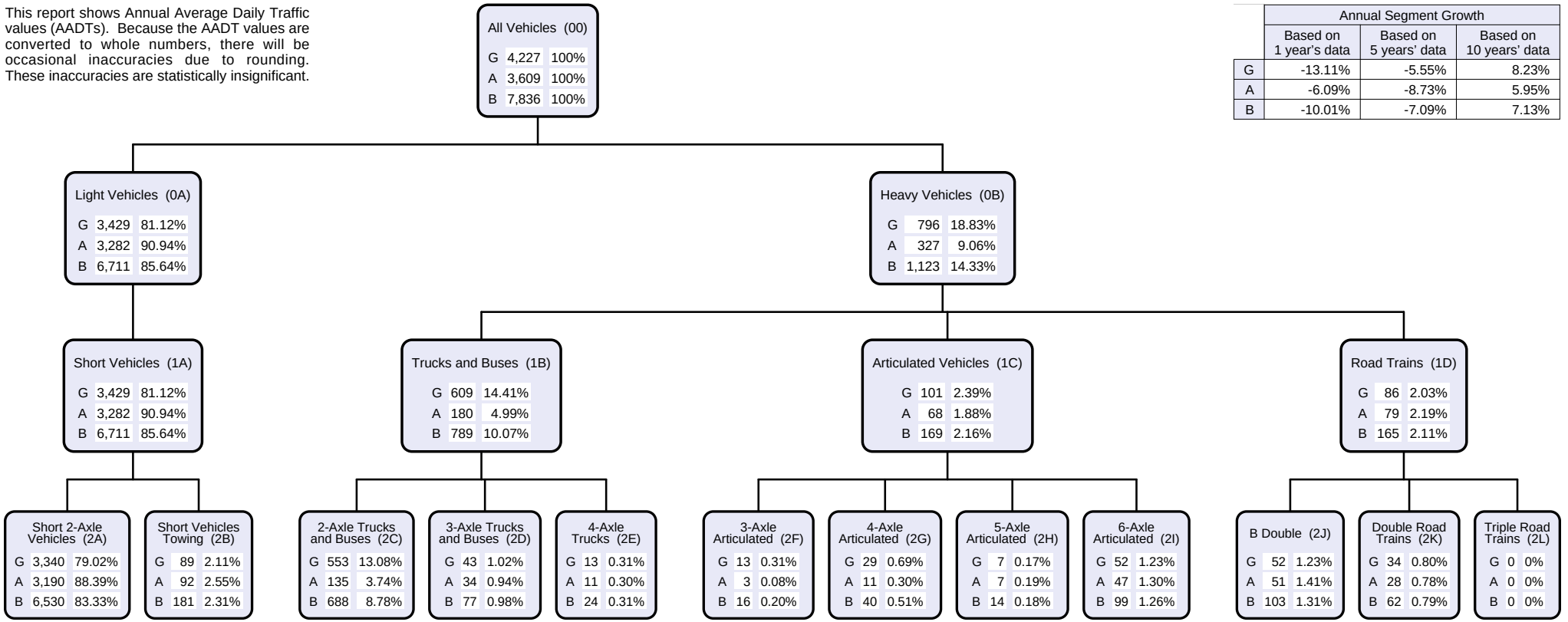
G	0	0%
A	0	0%
B	0	0%

The width of each Road Segment is proportional to its AADT.

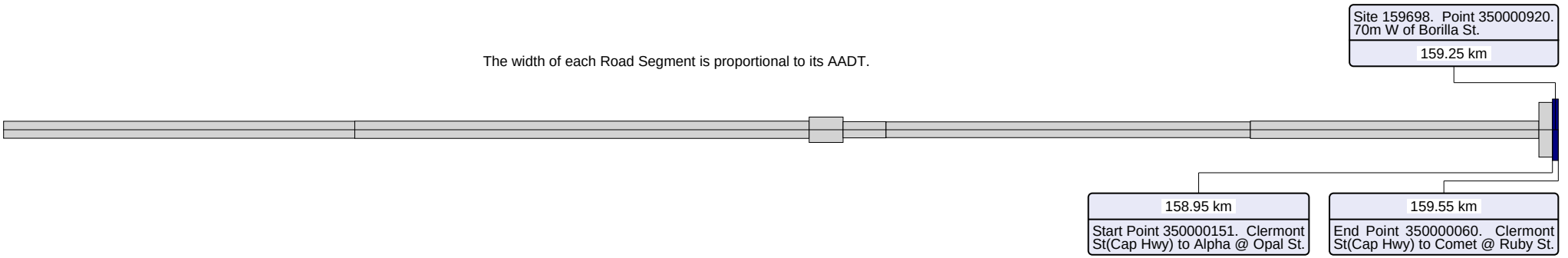


This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-13.11%	-5.55%	8.23%
A	-6.09%	-8.73%	5.95%
B	-10.01%	-7.09%	7.13%

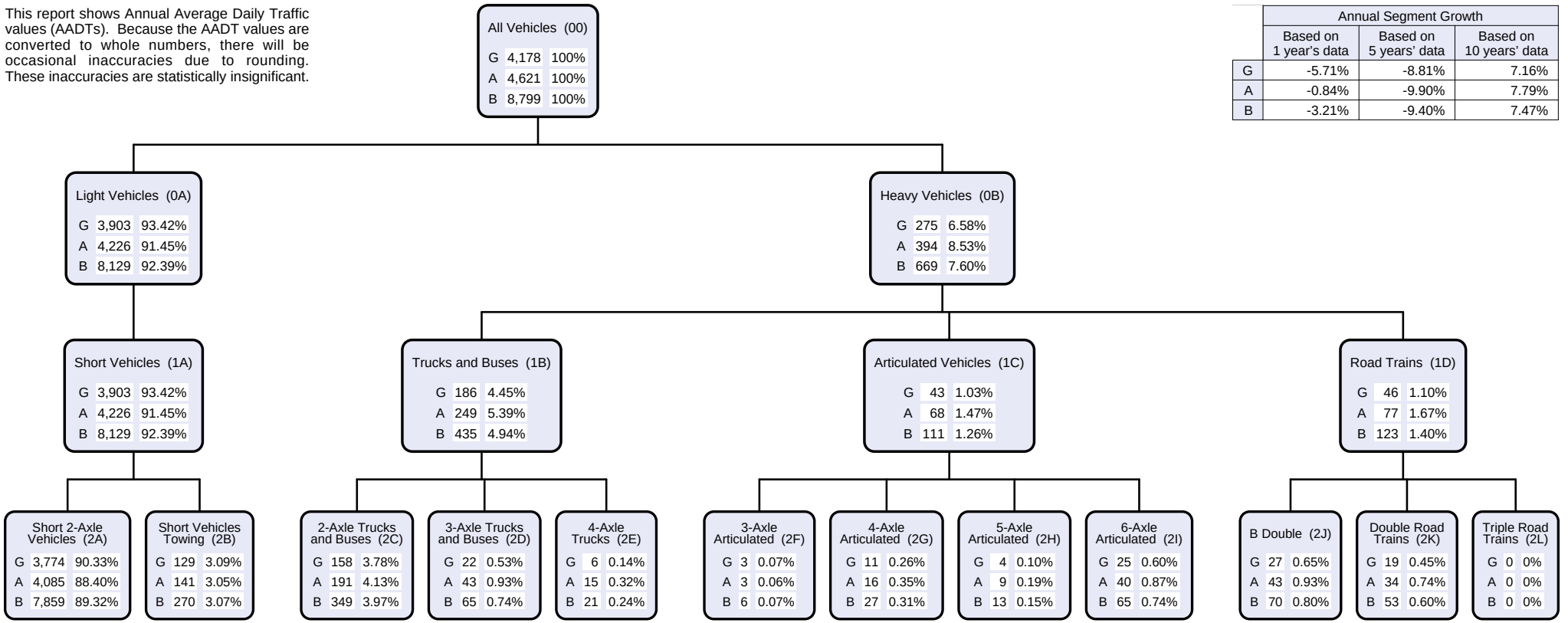


The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-5.71%	-8.81%	7.16%
A	-0.84%	-9.90%	7.79%
B	-3.21%	-9.40%	7.47%



Report Notes for AADT Segment Analysis Report (Complete)

AADT Segment Report

Provides AADT Segment details for a Road Section together with the traffic flow data collected at the related Site. Traffic data is reported by the start and end Through Distance of the AADT Segments on each section of road. The road segments are represented diagrammatically with AADT data including:

AADT	by direction of traffic flow
VKT	Vehicle Kilometres Travelled
%VC	Percentage Vehicle Class as per the Austroads vehicle classification scheme

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segment

Is a subdivision of a Road Section. The boundaries of an AADT Segment are it's Start Point and End Point (or Start and End Through Distance (TDist)) within the Road Section. These distances are measured in kilometres from the begining of the Road Section in Gazettal Direction. AADT Segments are determined by the traffic volume, collected at a count Site, located within the limits of each AADT Segment.

Annual Segment Growth (when displayed)

A percentage that represents the increase or decrease in AADT for the AADT Segment,using an exponential fit, calculated over a 1, 5 or 10 year period.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Data Year

The most recent year the traffic data was collected for this AADT Segment.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

G	Traffic flowing in Gazettal Direction
A	Traffic flowing against Gazettal Direction
B	The combined traffic flow in both Directions

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site TDist

The Through Distance in gazettal direction from the start of the Road Section at which the site is located.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Through Distance

The distance, in kilometres, from the beginning of the Road Section in Gazettal Direction.

Traffic Class

Is the 12 Austroads vehicle categories or classes into which vehicles are placed or binned. Traffic classes are formed in a hierarchical format.

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A
1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles.

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Vehicle Kilometres Travelled (VKT)

Daily VKT is a measure of the traffic demand. It is calculated by the length of an AADT Segment in kilometres multiplied by its AADT. The yearly VKT is the daily VKT multiplied by 365 days.

AADT Segment Summary - All Vehicles

The Total VKT can be used to gauge the demand on an entire Road Section.

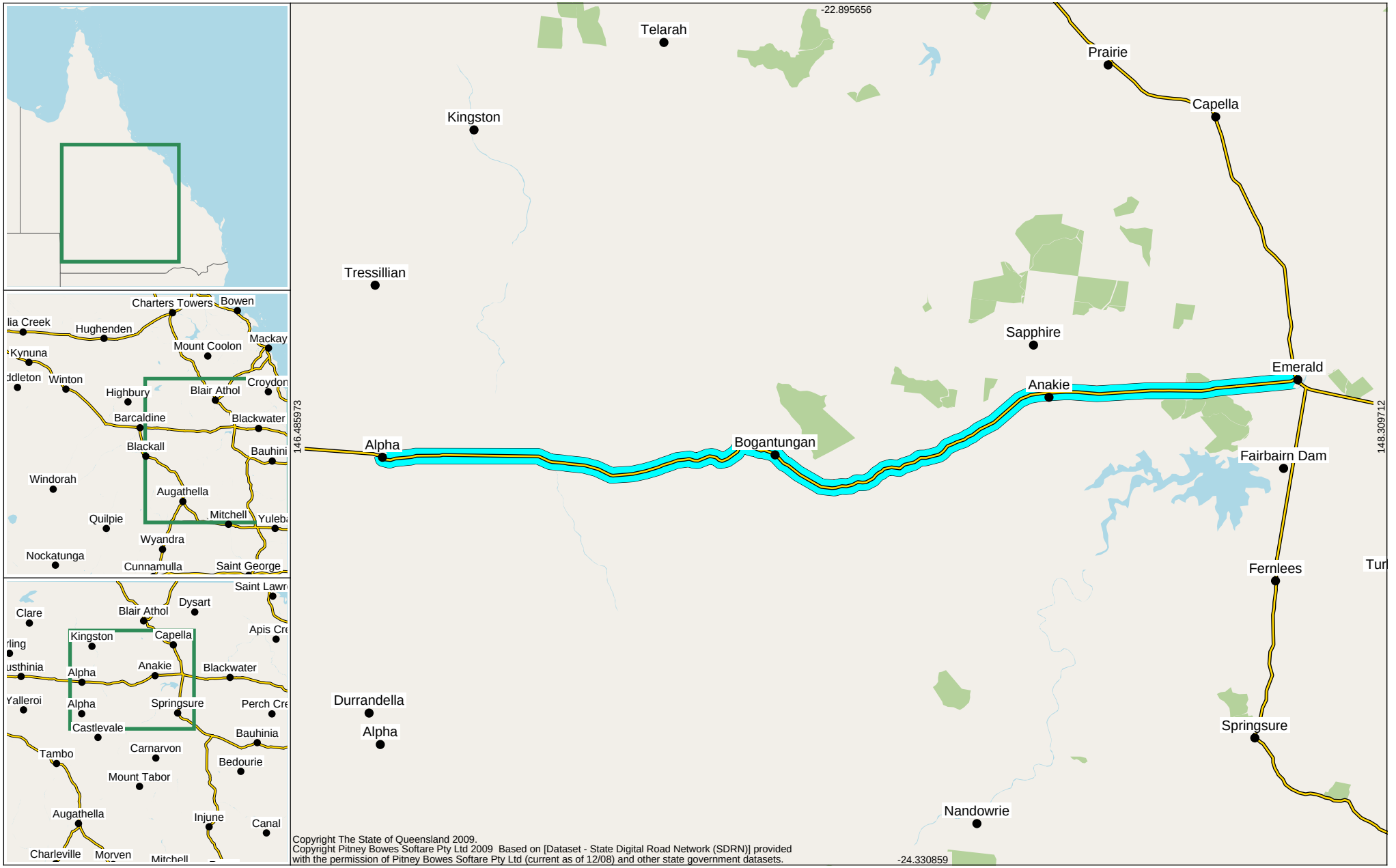
AADT Segment Summary - Heavy Vehicles only

A blank field indicates that vehicle classification data was not collected for this AADT Segment.

AADT Segment Analysis Report (Complete)

Road Section 16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)

Traffic Year 2017



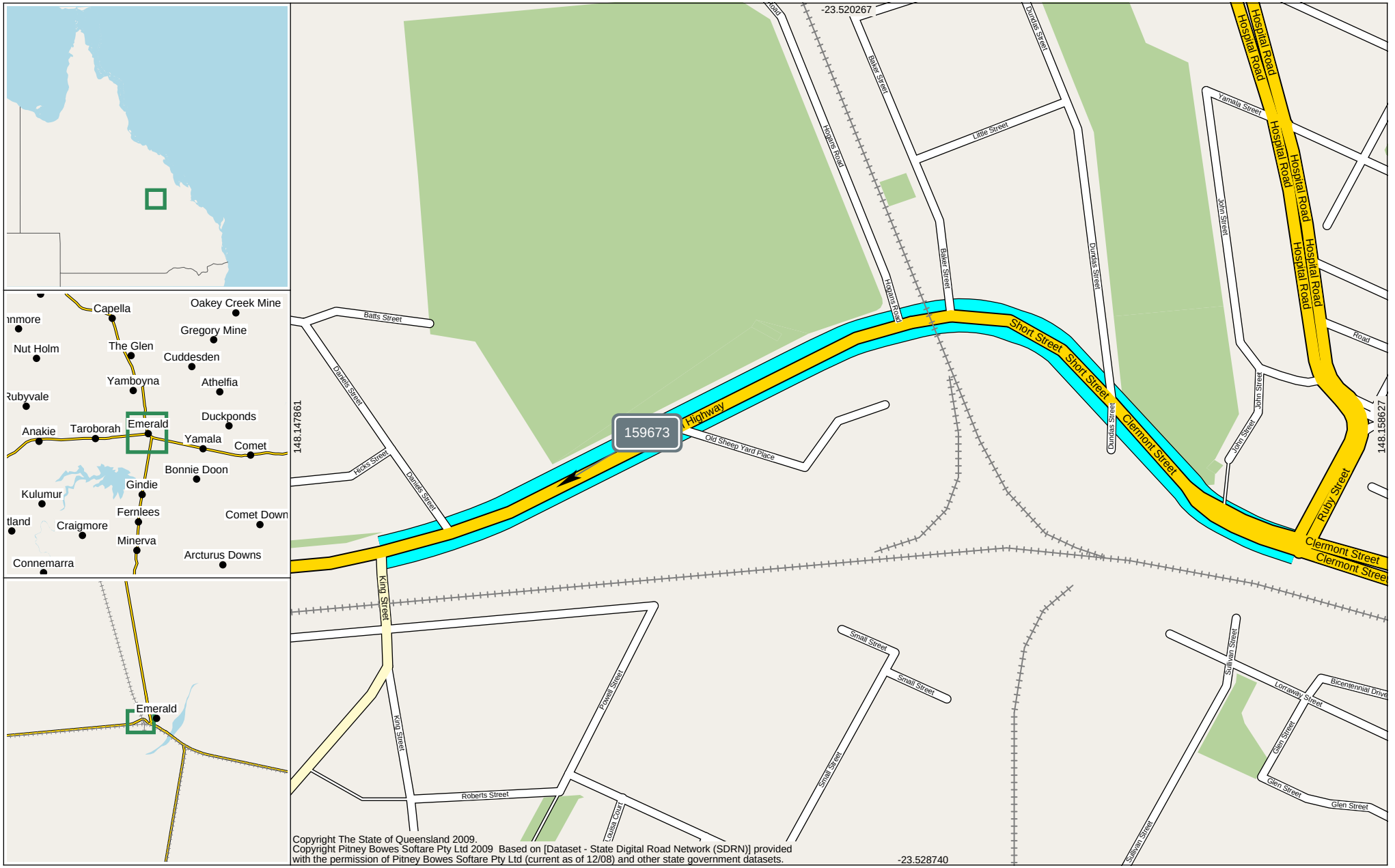
Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	1.080 km	159673	0.890 km	Capricorn Hwy 200m E of Int.16C/Selma Rd	2,458	2,532	4,990	0.96894	0.99811	1.96706	2017	2
404	1.080 km	2.170 km	159674	1.325 km	Capricorn Hwy 250m W of Int.16C/Selma Rd	1,155	1,228	2,383	0.45952	0.48856	0.94808	2017	3
404	2.170 km	43.300 km	150014	6.400 km	Capricorn Hwy 500m West of Marshall Road	615	624	1,239	9.23266	9.36777	18.60043	2017	4
404	43.300 km	70.531 km	159568	43.800 km	Capricorn Hwy 500m W of Int.16C/5501	210	209	419	2.08726	2.07732	4.16457	2017	5
404	70.531 km	107.950 km	159715	85.451 km	250m W of Kelly's Creek	223	221	444	3.04572	3.01840	6.06412	2017	6
401	107.950 km	167.940 km	150030	159.500 km	Capricorn Highway 8km East of Alpha	204	212	416	4.46686	4.64203	9.10888	2017	7
								Totals	20.26095	20.59219	40.85314		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	1.080 km	159673	0.890 km	Capricorn Hwy 200m E of Int.16C/Selma Rd	362	14.73%	235	9.28%	597	11.96%	0.14270	0.09264	0.23534	2017	2
404	1.080 km	2.170 km	159674	1.325 km	Capricorn Hwy 250m W of Int.16C/Selma Rd	188	16.28%	166	13.52%	354	14.86%	0.07480	0.06604	0.14084	2017	3
404	2.170 km	43.300 km	150014	6.400 km	Capricorn Hwy 500m West of Marshall Road	138	22.44%	120	19.23%	258	20.82%	2.07172	1.80149	3.87321	2017	4
404	43.300 km	70.531 km	159568	43.800 km	Capricorn Hwy 500m W of Int.16C/5501	101	48.10%	45	21.53%	146	34.84%	1.00387	0.44727	1.45114	2017	5
404	70.531 km	107.950 km	159715	85.451 km	250m W of Kelly's Creek	66	29.60%	52	23.53%	118	26.58%	0.90142	0.71021	1.61164	2017	6
401	107.950 km	167.940 km	150030	159.500 km	Capricorn Highway 8km East of Alpha	65	31.86%	48	22.64%	113	27.16%	1.42326	1.05102	2.47429	2017	7
											Totals	5.61777	4.16868	9.78645		



AADT Segment Analysis Report (Complete)

Area 404 - Fitzroy District Road Section 16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)

Traffic Year 2017 - Data Collection Year 2017

Site 159673. Point 350000700. 200m East of Int. 16C/Selma Rd.

0.89 km

The width of each Road Segment is proportional to its AADT.

0.00 km

Start Point 350000036. Capricorn Hwy to Alpha @ Ruby St.

1.08 km

End Point 350000161. Capricorn Hwy to Alpha @ Selma Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-7.87%	-9.82%	6.87%
A	-5.98%	-9.67%	7.05%
B	-6.92%	-9.75%	6.96%

All Vehicles (00)

G	2,458	100%
A	2,532	100%
B	4,990	100%

Light Vehicles (0A)

G	2,095	85.23%
A	2,296	90.68%
B	4,391	88.00%

Heavy Vehicles (0B)

G	362	14.73%
A	235	9.28%
B	597	11.96%

Short Vehicles (1A)

G	2,095	85.23%
A	2,296	90.68%
B	4,391	88.00%

Trucks and Buses (1B)

G	296	12.04%
A	181	7.15%
B	477	9.56%

Articulated Vehicles (1C)

G	42	1.71%
A	31	1.22%
B	73	1.46%

Road Trains (1D)

G	24	0.98%
A	23	0.91%
B	47	0.94%

Short 2-Axle Vehicles (2A)

G	1,991	81.00%
A	2,185	86.30%
B	4,176	83.69%

Short Vehicles Towing (2B)

G	104	4.23%
A	111	4.38%
B	215	4.31%

2-Axle Trucks and Buses (2C)

G	260	10.58%
A	145	5.73%
B	405	8.12%

3-Axle Trucks and Buses (2D)

G	24	0.98%
A	24	0.95%
B	48	0.96%

4-Axle Trucks (2E)

G	12	0.49%
A	12	0.47%
B	24	0.48%

3-Axle Articulated (2F)

G	10	0.41%
A	3	0.12%
B	13	0.26%

4-Axle Articulated (2G)

G	13	0.53%
A	8	0.32%
B	21	0.42%

5-Axle Articulated (2H)

G	2	0.08%
A	3	0.12%
B	5	0.10%

6-Axle Articulated (2I)

G	17	0.69%
A	17	0.67%
B	34	0.68%

B Double (2J)

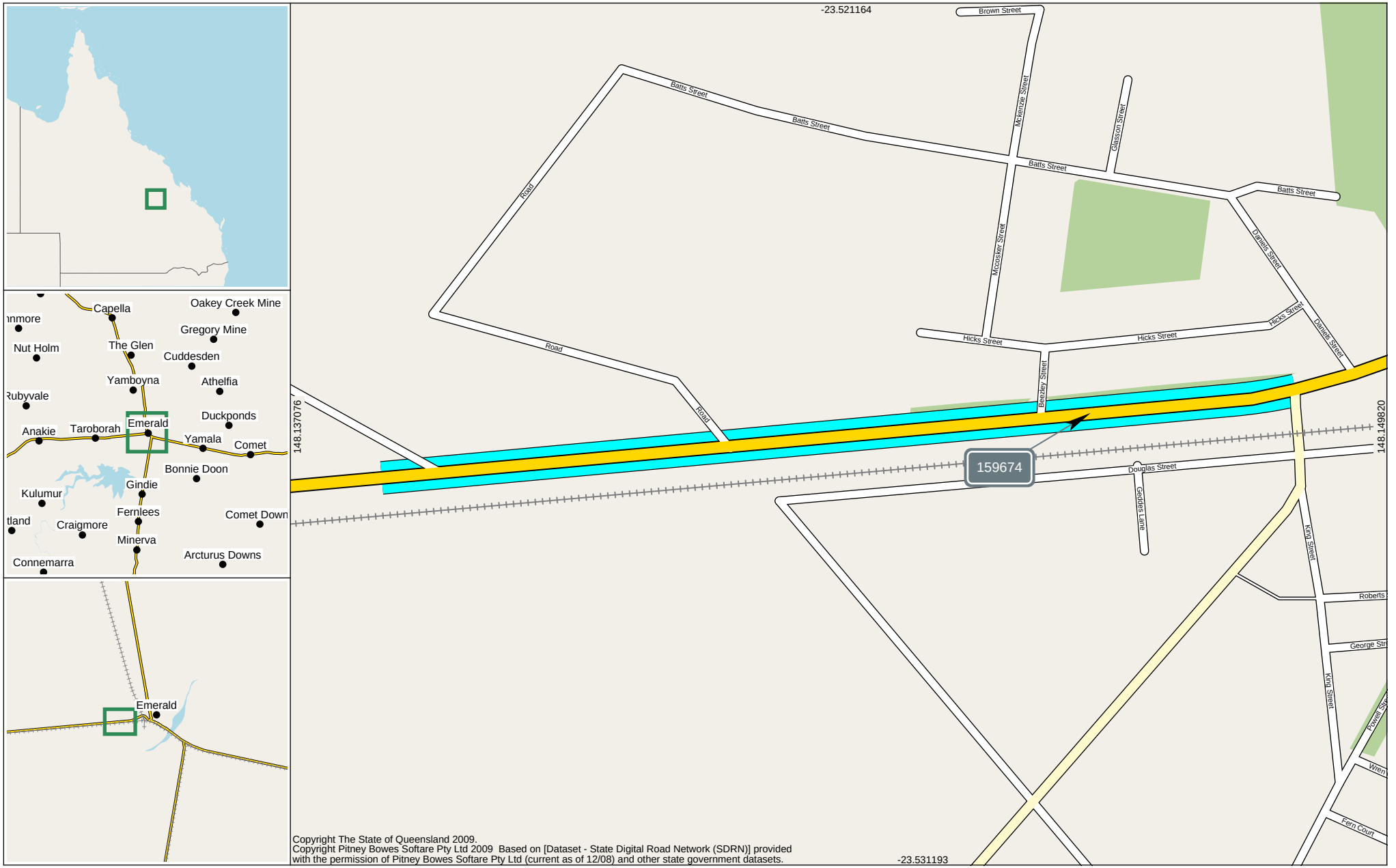
G	13	0.53%
A	12	0.47%
B	25	0.50%

Double Road Trains (2K)

G	11	0.45%
A	11	0.43%
B	22	0.44%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%



Site 159674. Point 350000701. 250m West of Int.16C/Selma Rd.
1.32 km

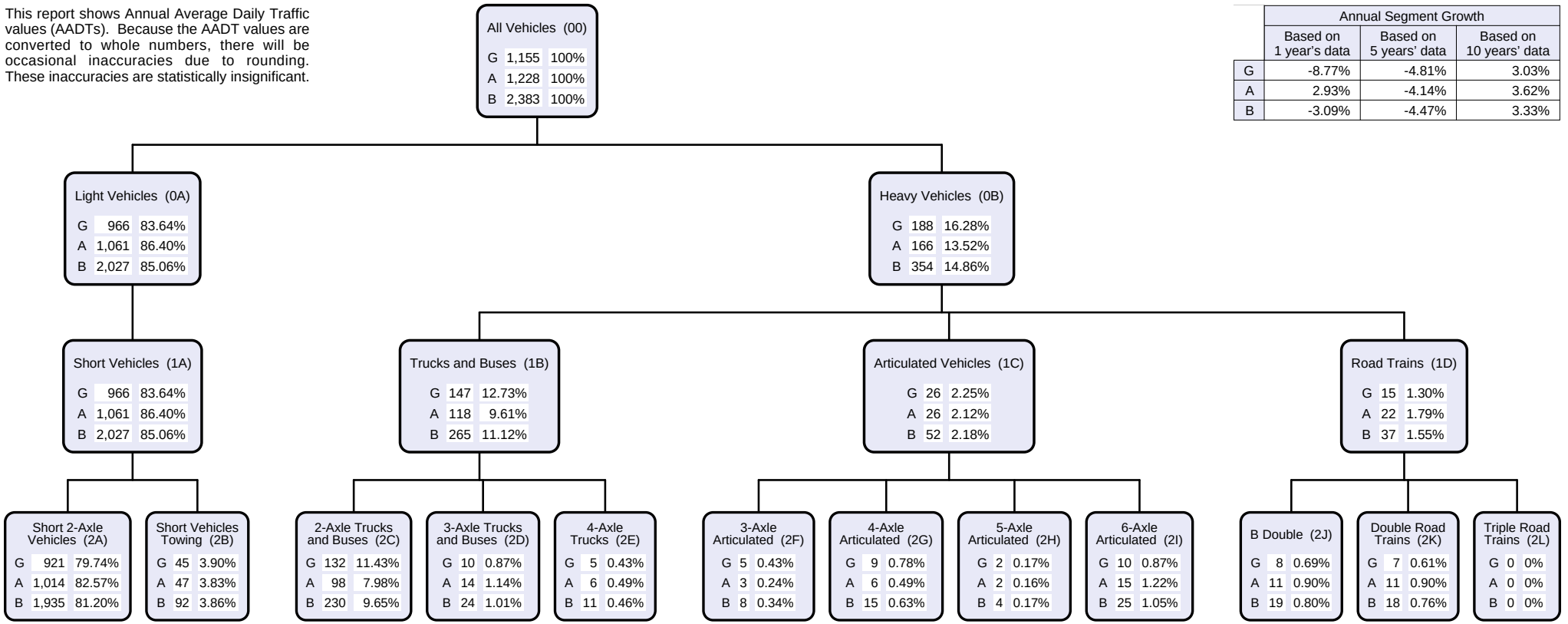
1.08 km
Start Point 350000161. Capricorn Hwy to Alpha @ Selma Rd.

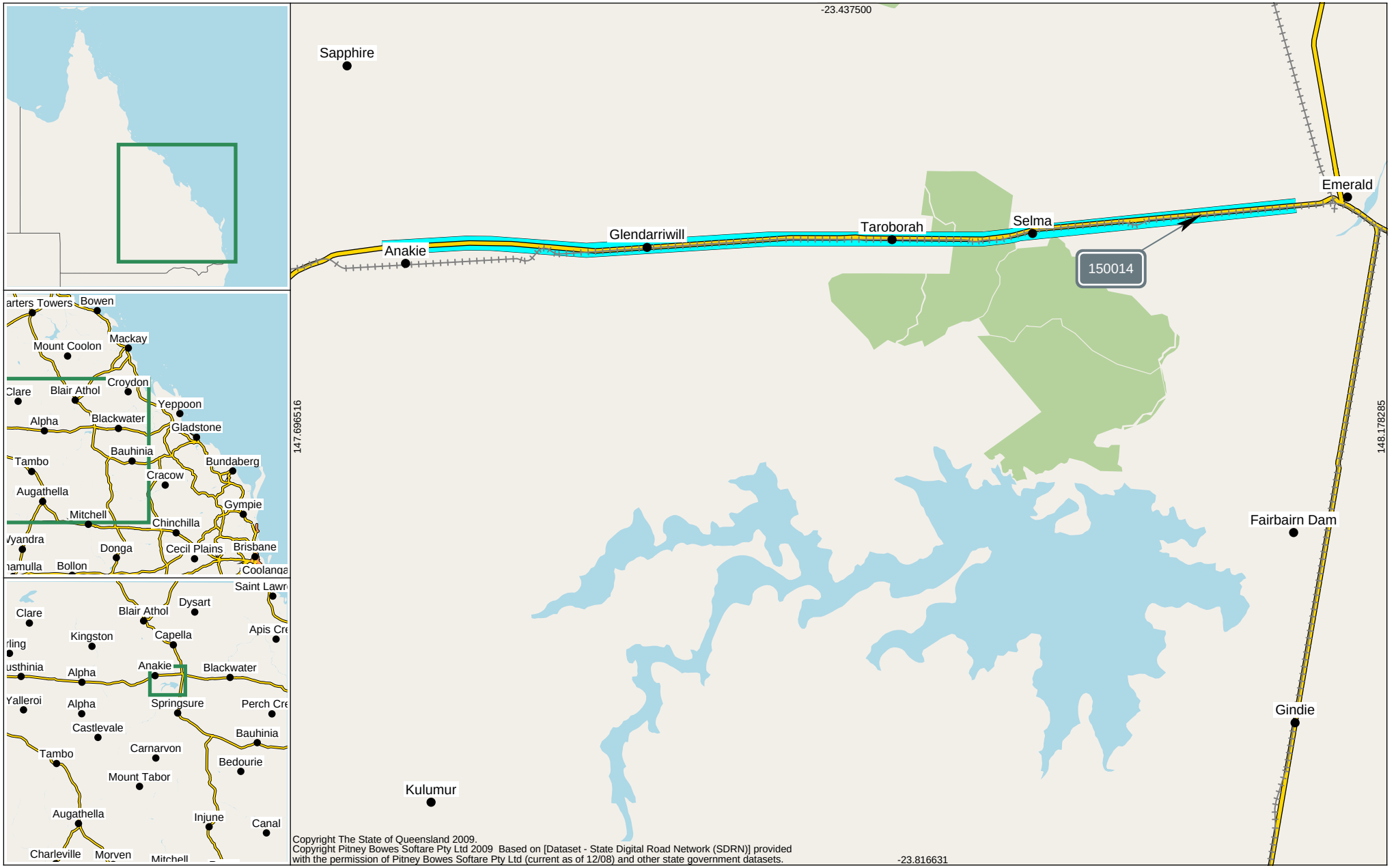
2.17 km
End Point 350000164. Capricorn Hwy to Alpha @ Tyson Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-8.77%	-4.81%	3.03%
A	2.93%	-4.14%	3.62%
B	-3.09%	-4.47%	3.33%

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Alpha
Gladstone
Bauhinia
Tambo
Bundaberg
Cracow
Augathella
Gympie
Mitchell
Chinchilla
Donga
Cecil Plains
Brisbane
Bollon
Coolanga
Dysart
Clare
Capella
Kingston
Alpha
Springsure
Castlevale
Carnarvon
Bedourie
Mount Tabor
Augathella
Injune
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Morven
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Site 150014. Point 350001084. 500m East of Marshall Rd.
6.40 km

The width of each Road Segment is proportional to its AADT.

2.17 km
Start Point 350000164. Capricorn Hwy to Alpha @ Tyson Rd.

43.30 km
End Point 350000037. Cap Hwy to Alpha@Anakie-Sapphire Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-2.69%	-3.11%	-0.88%
A	-2.80%	-2.83%	-0.71%
B	-2.75%	-2.97%	-0.79%

All Vehicles (00)

G	615	100%
A	624	100%
B	1,239	100%

Light Vehicles (0A)

G	477	77.56%
A	504	80.77%
B	981	79.18%

Heavy Vehicles (0B)

G	138	22.44%
A	120	19.23%
B	258	20.82%

Short Vehicles (1A)

G	477	77.56%
A	504	80.77%
B	981	79.18%

Trucks and Buses (1B)

G	92	14.96%
A	77	12.34%
B	169	13.64%

Articulated Vehicles (1C)

G	25	4.07%
A	21	3.37%
B	46	3.71%

Road Trains (1D)

G	21	3.41%
A	22	3.53%
B	43	3.47%

Short 2-Axle Vehicles (2A)

G	440	71.54%
A	474	75.96%
B	914	73.77%

Short Vehicles Towing (2B)

G	37	6.02%
A	30	4.81%
B	67	5.41%

2-Axle Trucks and Buses (2C)

G	81	13.17%
A	66	10.58%
B	147	11.86%

3-Axle Trucks and Buses (2D)

G	7	1.14%
A	7	1.12%
B	14	1.13%

4-Axle Trucks (2E)

G	4	0.65%
A	4	0.64%
B	8	0.65%

3-Axle Articulated (2F)

G	6	0.98%
A	4	0.64%
B	10	0.81%

4-Axle Articulated (2G)

G	8	1.30%
A	6	0.96%
B	14	1.13%

5-Axle Articulated (2H)

G	1	0.16%
A	1	0.16%
B	2	0.16%

6-Axle Articulated (2I)

G	10	1.63%
A	10	1.60%
B	20	1.61%

B Double (2J)

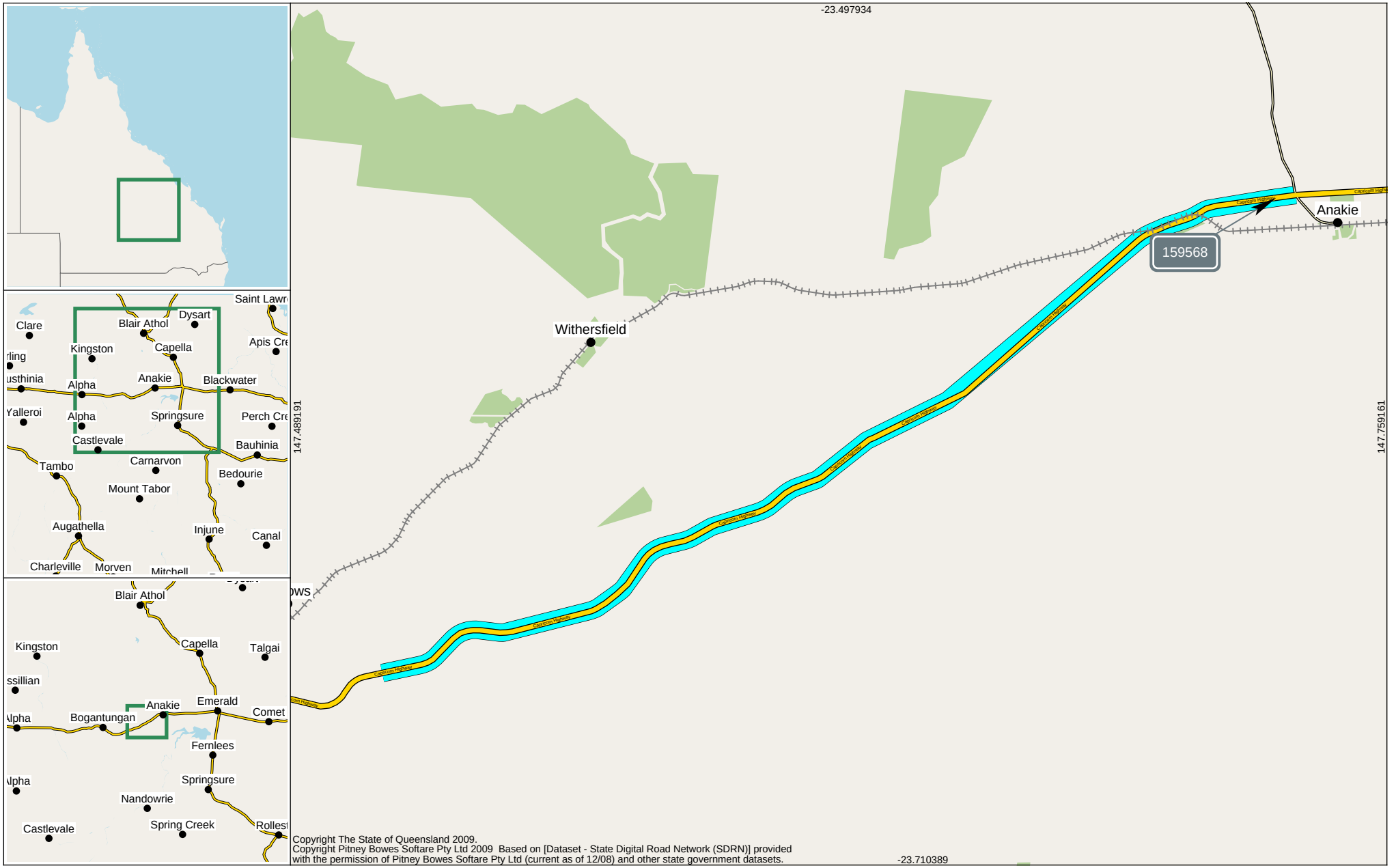
G	10	1.63%
A	11	1.76%
B	21	1.69%

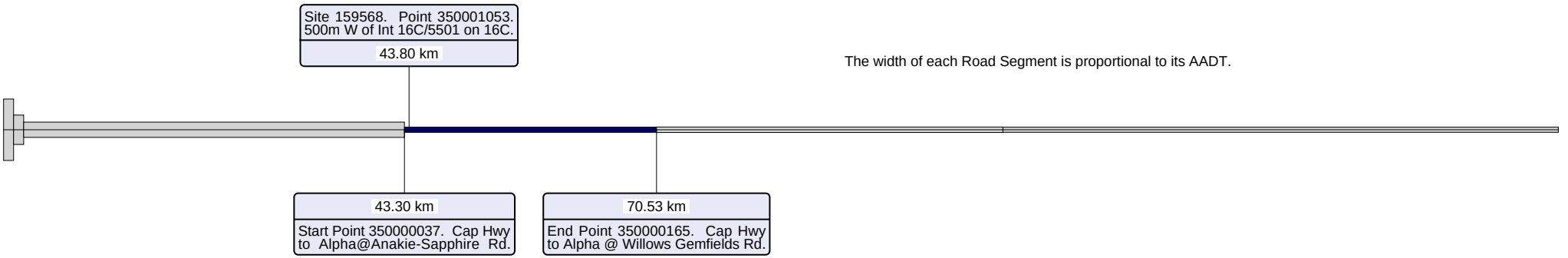
Double Road Trains (2K)

G	11	1.79%
A	11	1.76%
B	22	1.78%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%





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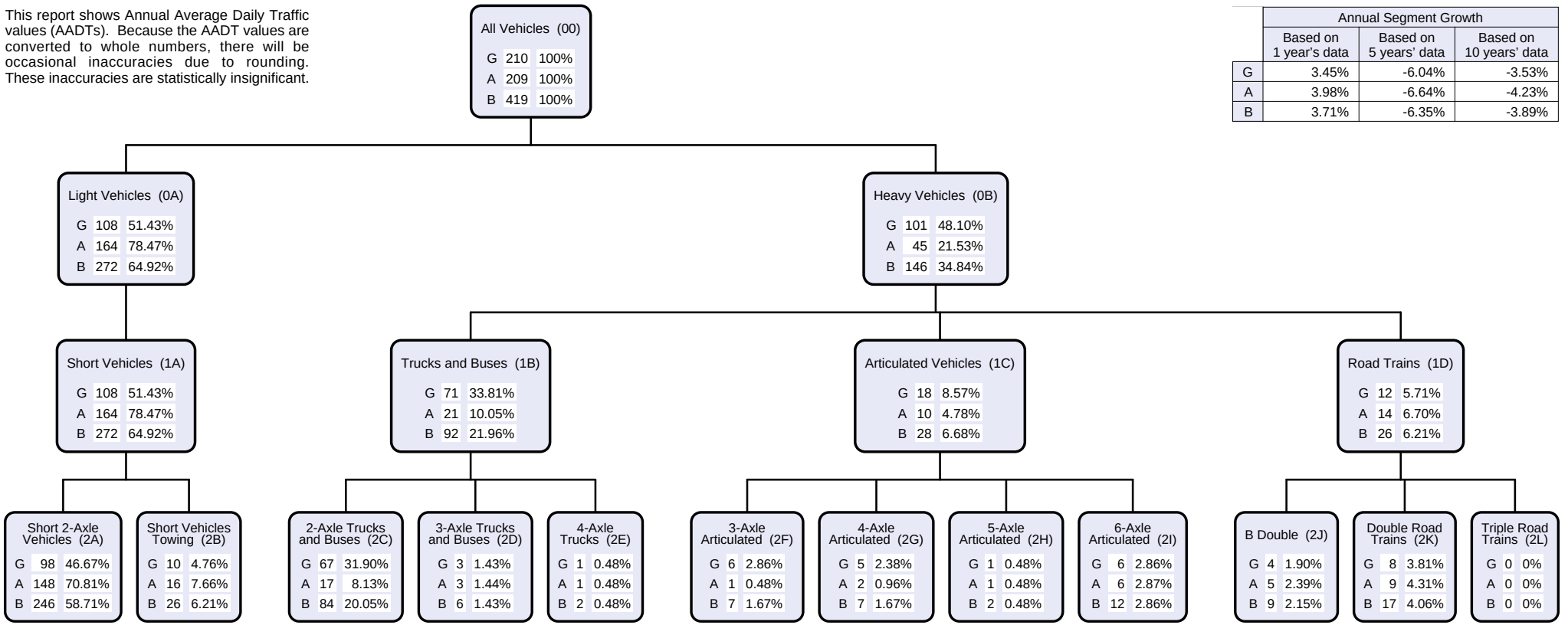
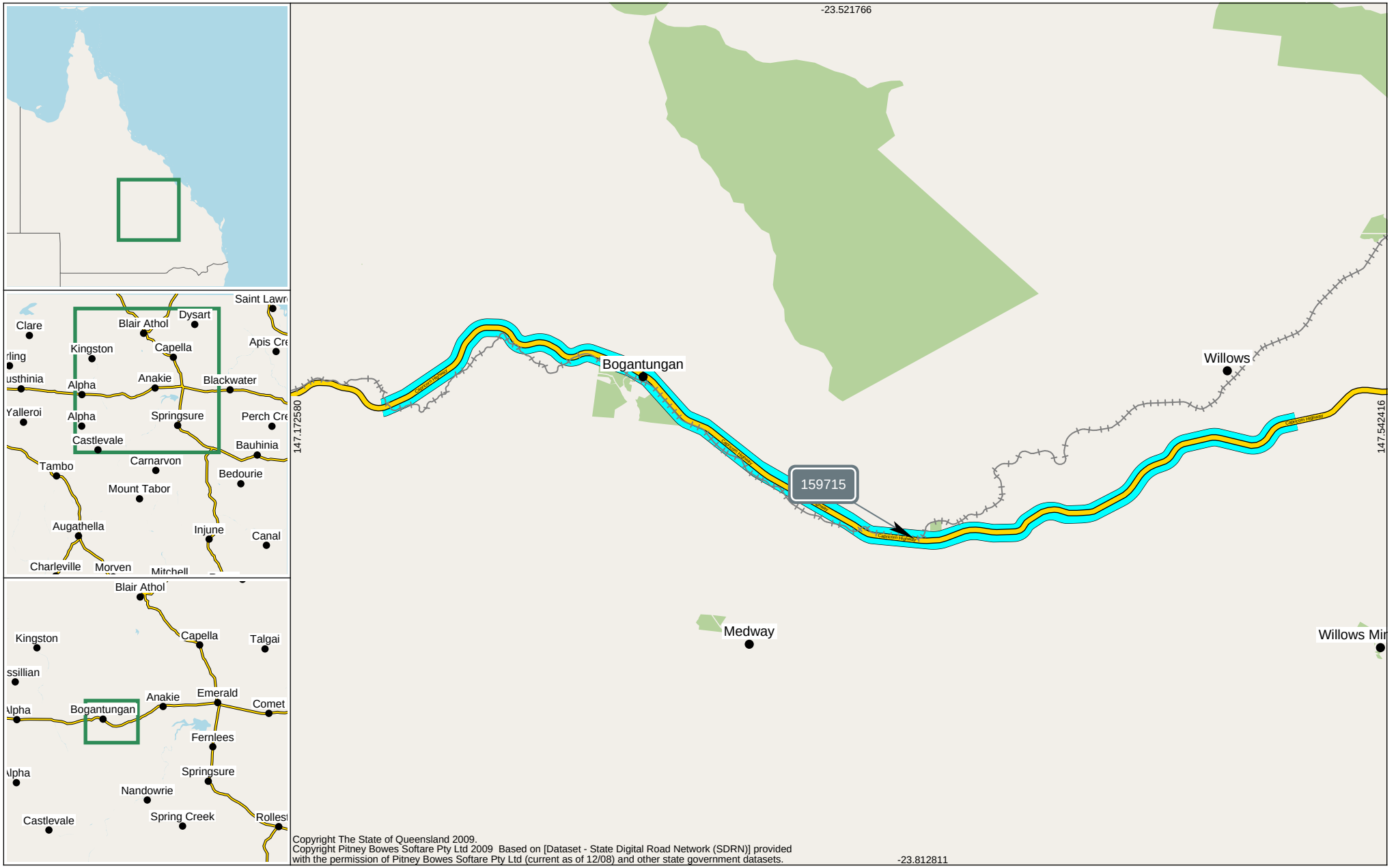
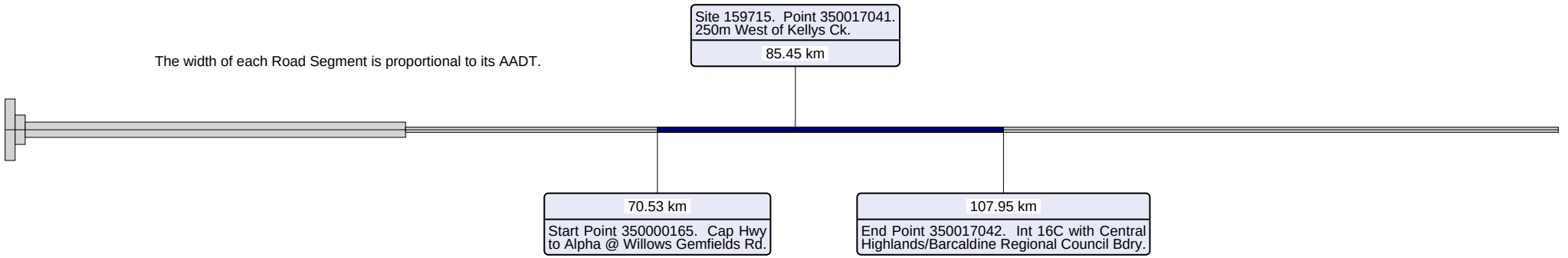
	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	3.45%	-6.04%	-3.53%
A	3.98%	-6.64%	-4.23%
B	3.71%	-6.35%	-3.89%







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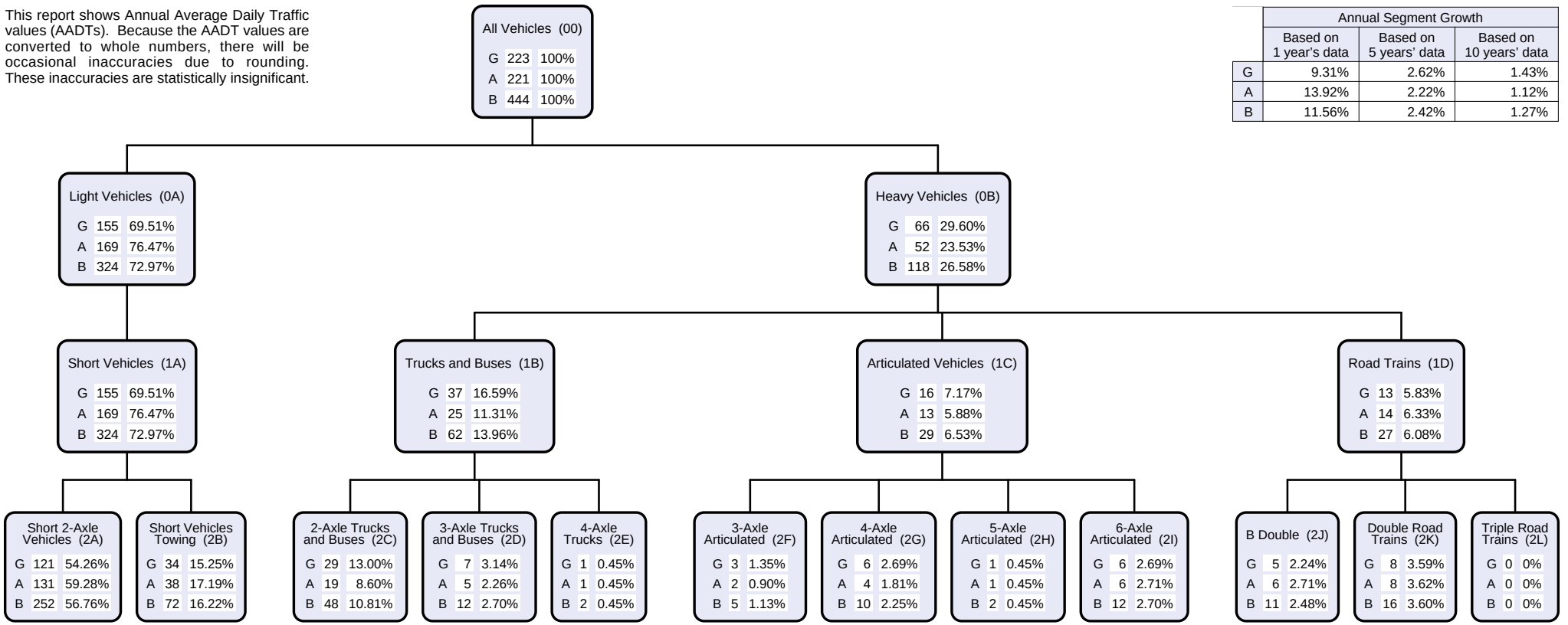
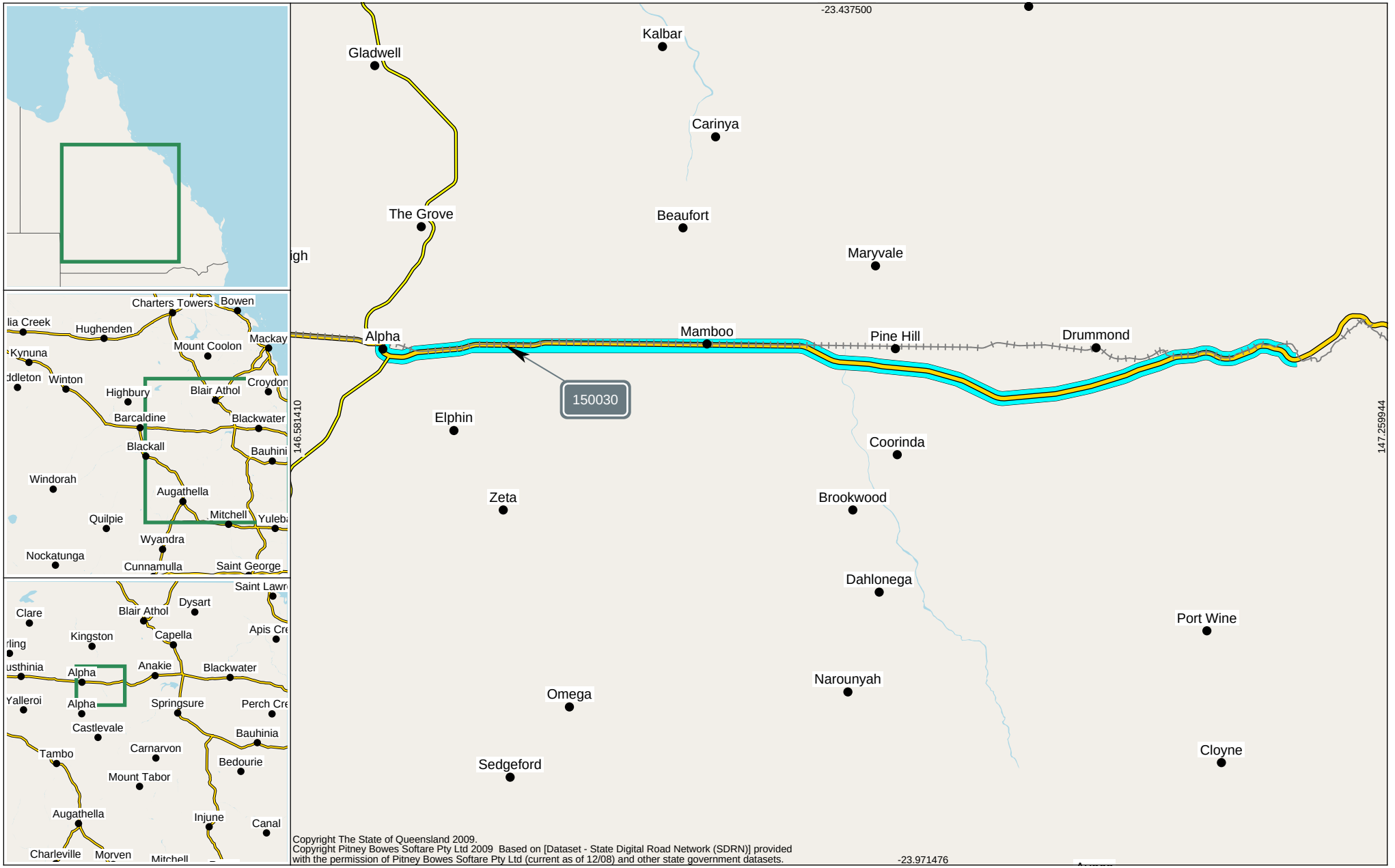
	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	9.31%	2.62%	1.43%
A	13.92%	2.22%	1.12%
B	11.56%	2.42%	1.27%

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Pine Hill
Drummond
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Brookwood
Dahlonega
Port Wine
Narounyah
Omega
Sedgeford
Cloyne
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Charters Towers
Bowen
Hughenden
Mount Coolon
Mackay
Winton
Highbury
Blair Athol
Croydon
Barcaldine
Blackwater
Blackall
Bauhinia
Windorah
Augathella
Quilpie
Mitchell
Wyandra
Nockatunga
Cunnamulla
Saint George
Clare
Dysart
Kingston
Capella
Anakie
Springsure
Castlevale
Carnarvon
Tambo
Bedourie
Mount Tabor
Injune
Canal
Charleville
Morven
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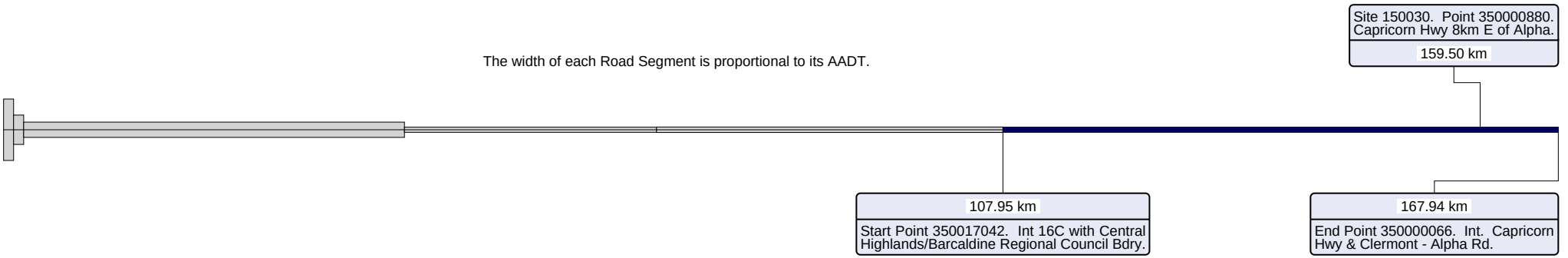
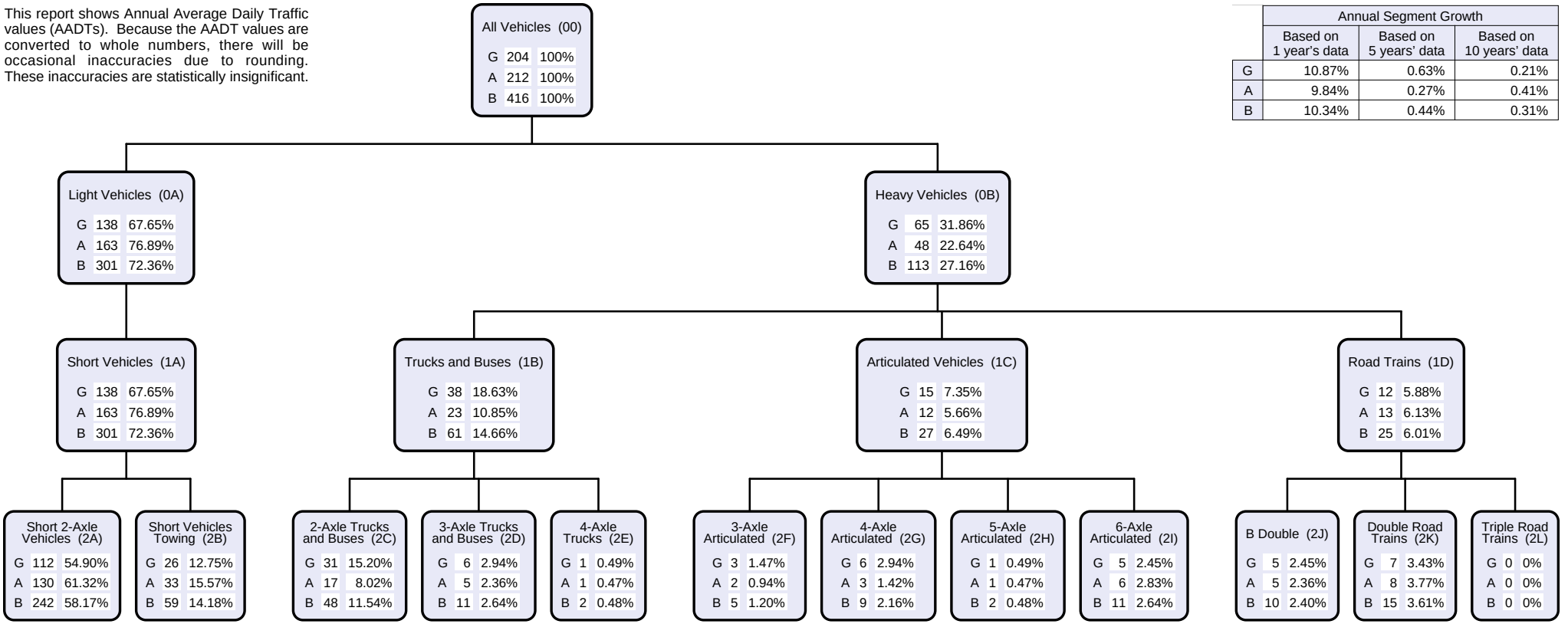
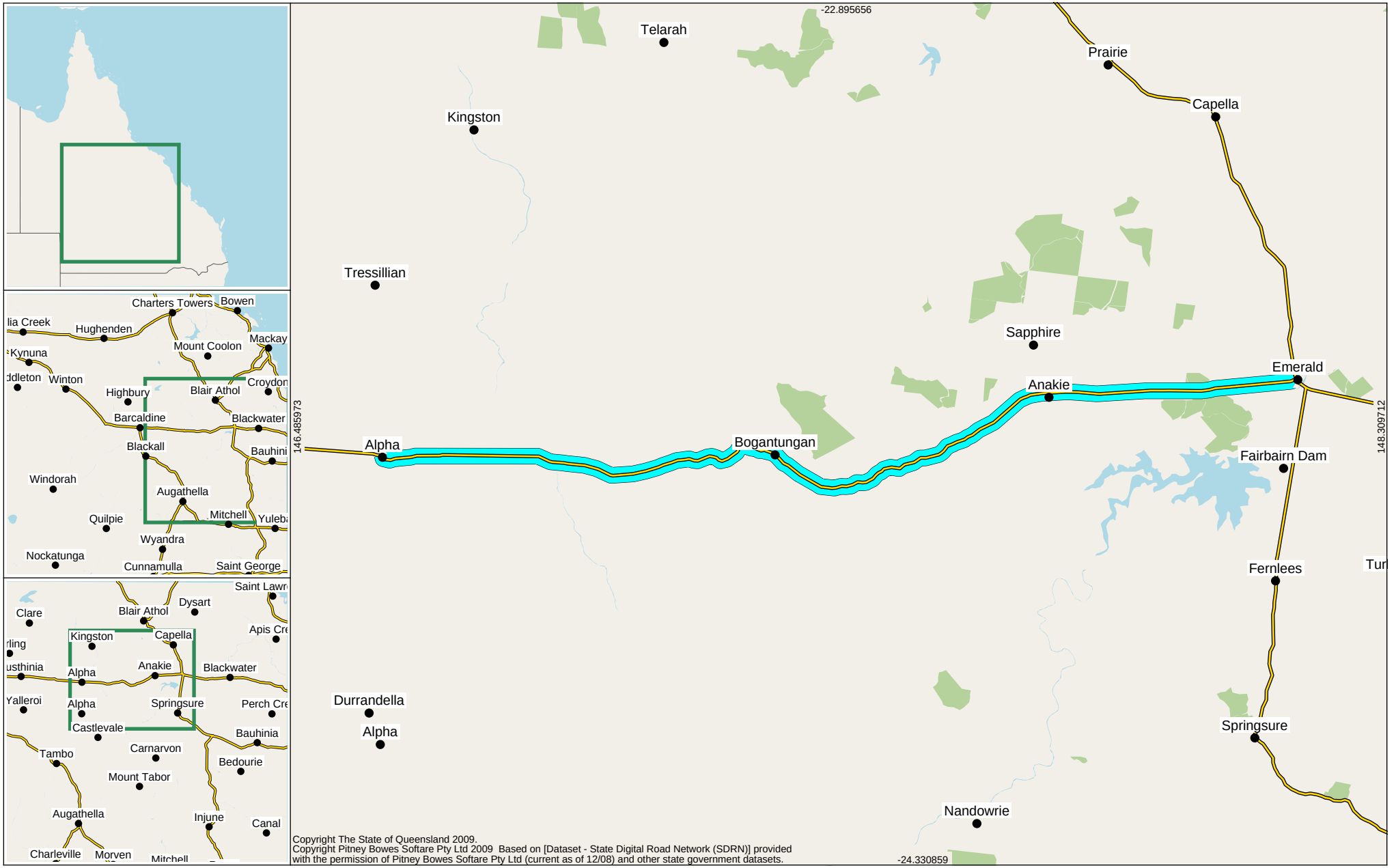
The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	10.87%	0.63%	0.21%
A	9.84%	0.27%	0.41%
B	10.34%	0.44%	0.31%

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Kingston
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Emerald
Anakie
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Fernlees
Springsure
Durrandella
Alpha
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Bowen
Hughenden
Mount Coolon
Mackay
Winton
Highbury
Blair Athol
Croydon
Barcaldine
Blackwater
Blackall
Bauhinia
Windorah
Augathella
Quilpie
Mitchell
Wyandra
Nockatunga
Cunnamulla
Saint George
Dysart
Clare
Kingston
Capella
Alpha
Anakie
Blackwater
Springsure
Castlevale
Carnarvon
Tambo
Bedourie
Mount Tabor
Augathella
Injune
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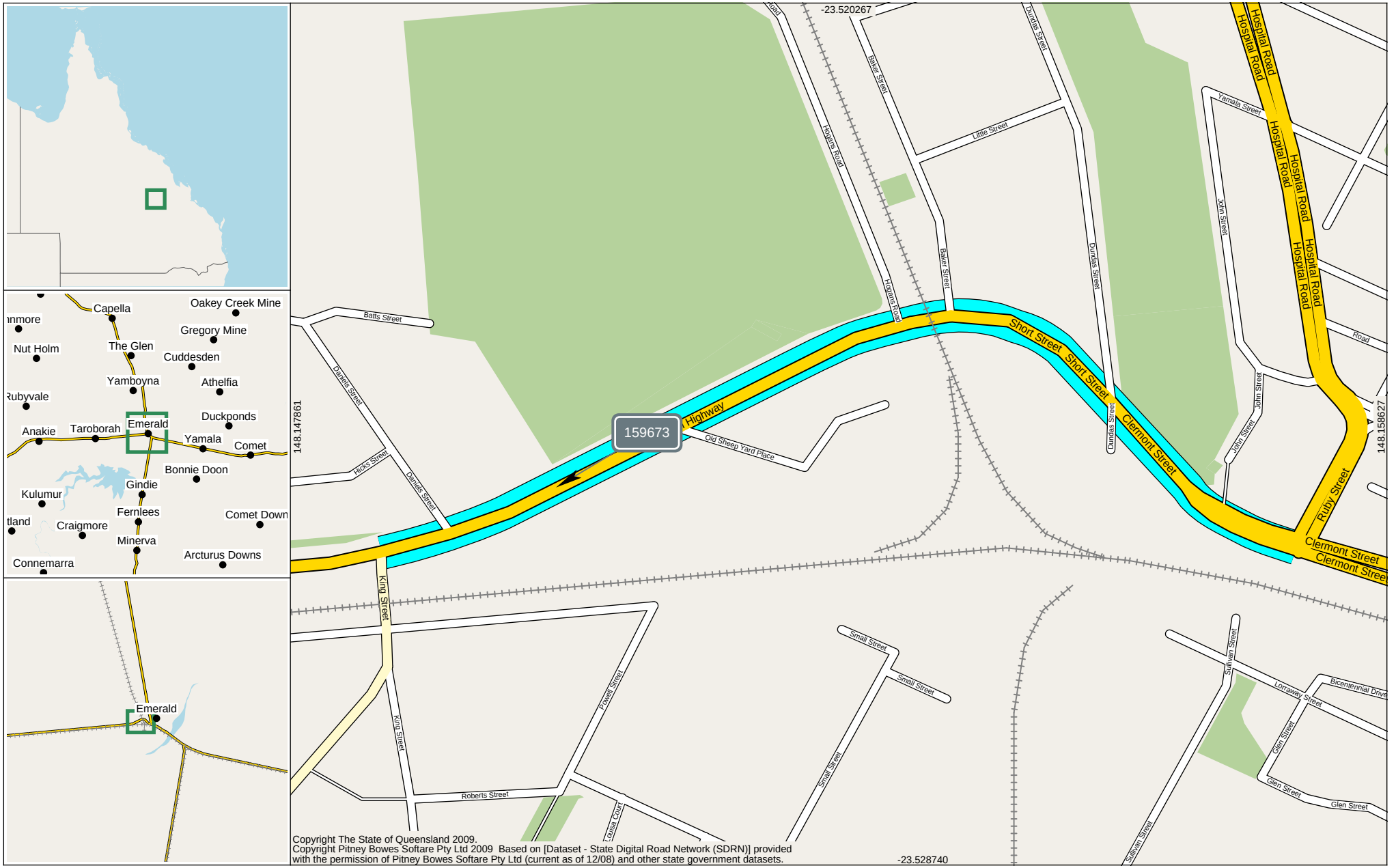
Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
404	0.000 km	1.080 km	159673	0.890 km	Capricorn Hwy 200m E of Int.16C/Selma Rd	2,458	2,532	4,990	0.96894	0.99811	1.96706	2017	2
404	1.080 km	2.170 km	159674	1.325 km	Capricorn Hwy 250m W of Int.16C/Selma Rd	1,155	1,228	2,383	0.45952	0.48856	0.94808	2017	3
404	2.170 km	43.300 km	150014	6.400 km	Capricorn Hwy 500m West of Marshall Road	615	624	1,239	9.23266	9.36777	18.60043	2017	4
404	43.300 km	70.531 km	159568	43.800 km	Capricorn Hwy 500m W of Int.16C/5501	210	209	419	2.08726	2.07732	4.16457	2017	5
404	70.531 km	107.950 km	159715	85.451 km	250m W of Kelly's Creek	223	221	444	3.04572	3.01840	6.06412	2017	6
401	107.950 km	167.940 km	150030	159.500 km	Capricorn Highway 8km East of Alpha	204	212	416	4.46686	4.64203	9.10888	2017	7
								Totals	20.26095	20.59219	40.85314		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

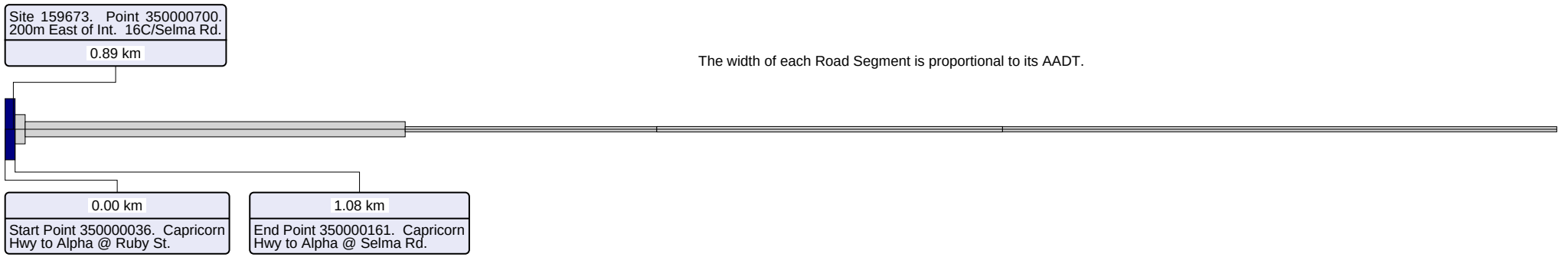
Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
404	0.000 km	1.080 km	159673	0.890 km	Capricorn Hwy 200m E of Int.16C/Selma Rd	362	14.73%	235	9.28%	597	11.96%	0.14270	0.09264	0.23534	2017	2
404	1.080 km	2.170 km	159674	1.325 km	Capricorn Hwy 250m W of Int.16C/Selma Rd	188	16.28%	166	13.52%	354	14.86%	0.07480	0.06604	0.14084	2017	3
404	2.170 km	43.300 km	150014	6.400 km	Capricorn Hwy 500m West of Marshall Road	138	22.44%	120	19.23%	258	20.82%	2.07172	1.80149	3.87321	2017	4
404	43.300 km	70.531 km	159568	43.800 km	Capricorn Hwy 500m W of Int.16C/5501	101	48.10%	45	21.53%	146	34.84%	1.00387	0.44727	1.45114	2017	5
404	70.531 km	107.950 km	159715	85.451 km	250m W of Kelly's Creek	66	29.60%	52	23.53%	118	26.58%	0.90142	0.71021	1.61164	2017	6
401	107.950 km	167.940 km	150030	159.500 km	Capricorn Highway 8km East of Alpha	65	31.86%	48	22.64%	113	27.16%	1.42326	1.05102	2.47429	2017	7
											Totals	5.61777	4.16868	9.78645		



AADT Segment Analysis Report (Complete)

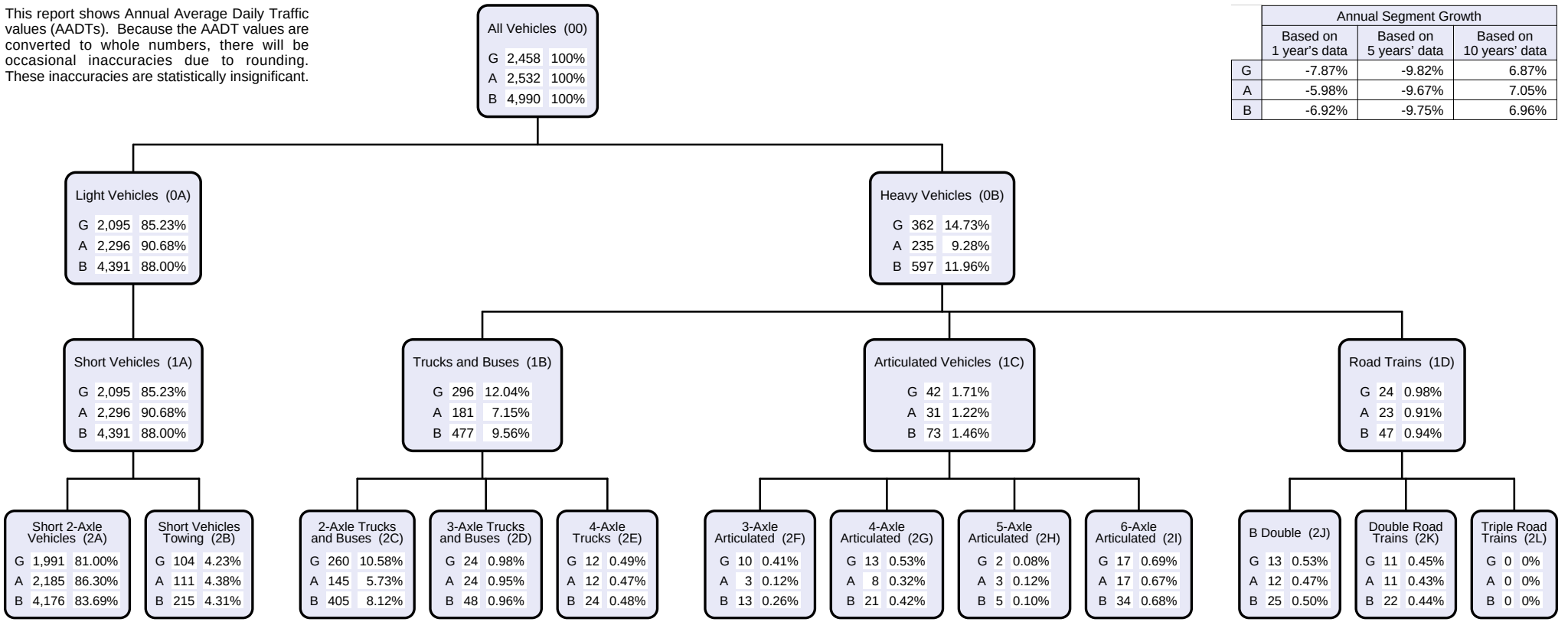
Area 404 - Fitzroy District Road Section 16C - CAPRICORN HIGHWAY (EMERALD - ALPHA)

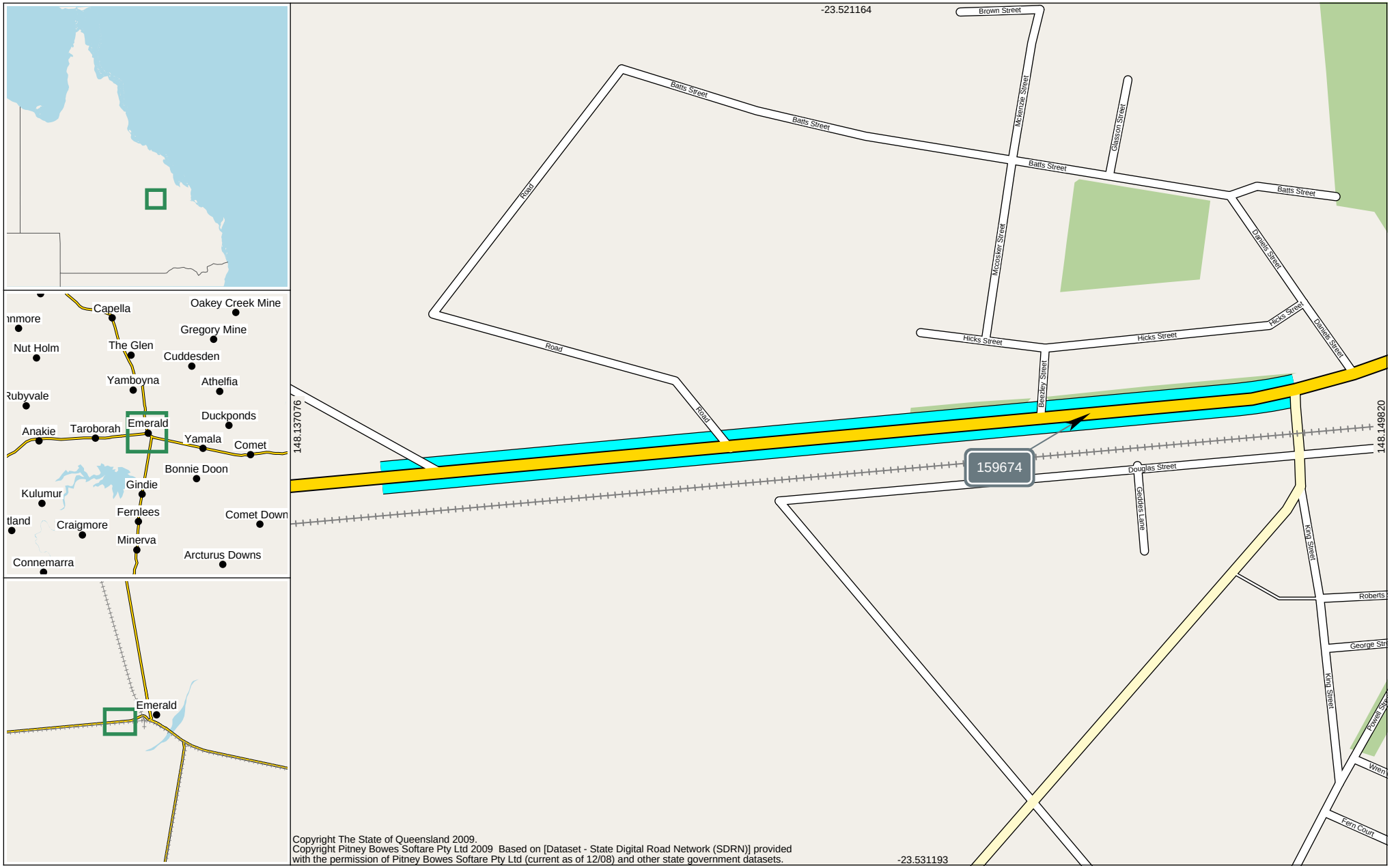
Traffic Year 2017 - Data Collection Year 2017



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-7.87%	-9.82%	6.87%
A	-5.98%	-9.67%	7.05%
B	-6.92%	-9.75%	6.96%





Site 159674. Point 350000701. 250m West of Int.16C/Selma Rd.

1.32 km

1.08 km

Start Point 350000161. Capricorn Hwy to Alpha @ Selma Rd.

2.17 km

End Point 350000164. Capricorn Hwy to Alpha @ Tyson Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-8.77%	-4.81%	3.03%
A	2.93%	-4.14%	3.62%
B	-3.09%	-4.47%	3.33%

All Vehicles (00)

G	1,155	100%
A	1,228	100%
B	2,383	100%

Light Vehicles (0A)

G	966	83.64%
A	1,061	86.40%
B	2,027	85.06%

Heavy Vehicles (0B)

G	188	16.28%
A	166	13.52%
B	354	14.86%

Short Vehicles (1A)

G	966	83.64%
A	1,061	86.40%
B	2,027	85.06%

Trucks and Buses (1B)

G	147	12.73%
A	118	9.61%
B	265	11.12%

Articulated Vehicles (1C)

G	26	2.25%
A	26	2.12%
B	52	2.18%

Road Trains (1D)

G	15	1.30%
A	22	1.79%
B	37	1.55%

Short 2-Axle Vehicles (2A)

G	921	79.74%
A	1,014	82.57%
B	1,935	81.20%

Short Vehicles Towing (2B)

G	45	3.90%
A	47	3.83%
B	92	3.86%

2-Axle Trucks and Buses (2C)

G	132	11.43%
A	98	7.98%
B	230	9.65%

3-Axle Trucks and Buses (2D)

G	10	0.87%
A	14	1.14%
B	24	1.01%

4-Axle Trucks (2E)

G	5	0.43%
A	6	0.49%
B	11	0.46%

3-Axle Articulated (2F)

G	5	0.43%
A	3	0.24%
B	8	0.34%

4-Axle Articulated (2G)

G	9	0.78%
A	6	0.49%
B	15	0.63%

5-Axle Articulated (2H)

G	2	0.17%
A	2	0.16%
B	4	0.17%

6-Axle Articulated (2I)

G	10	0.87%
A	15	1.22%
B	25	1.05%

B Double (2J)

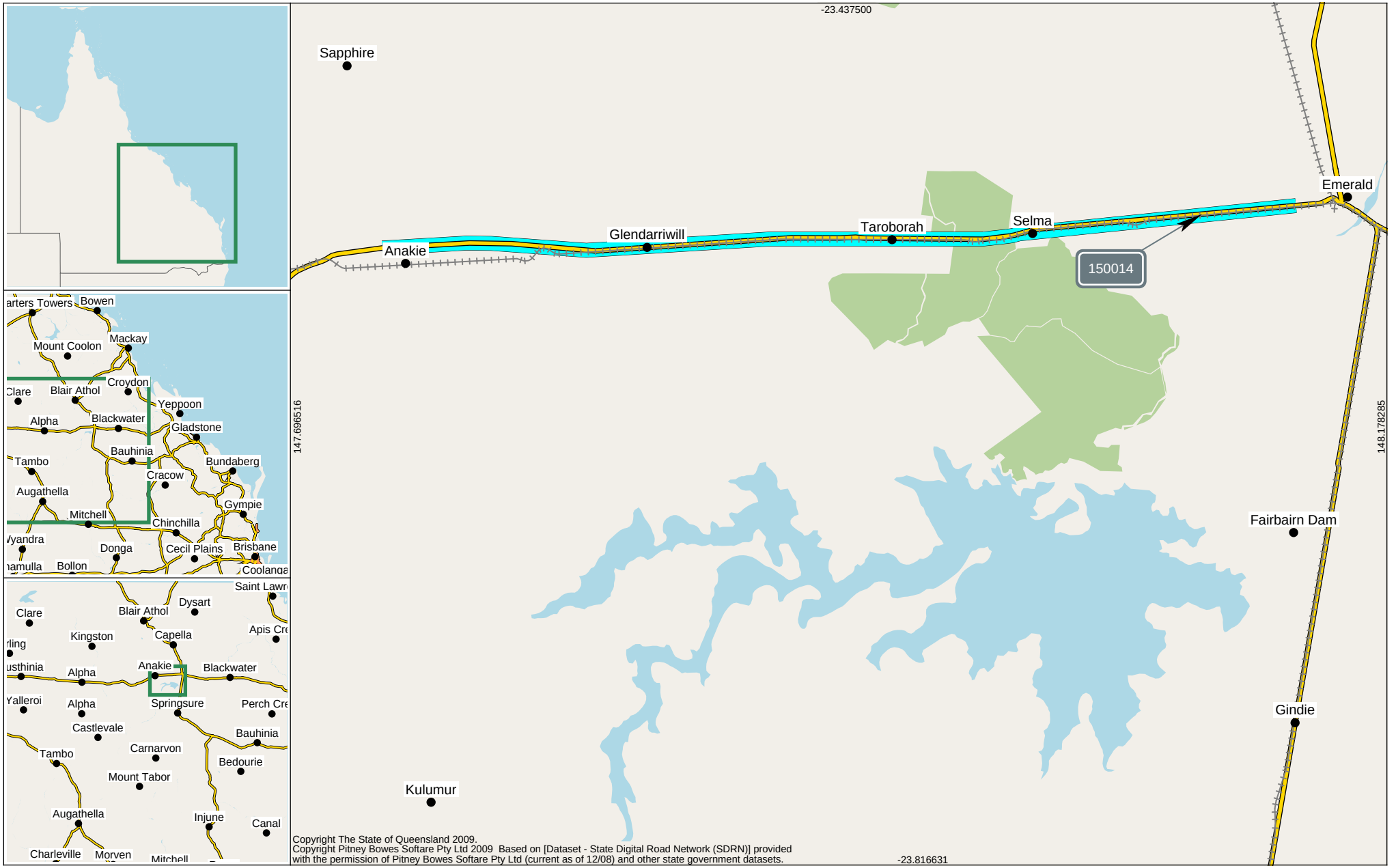
G	8	0.69%
A	11	0.90%
B	19	0.80%

Double Road Trains (2K)

G	7	0.61%
A	11	0.90%
B	18	0.76%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%



Site 150014. Point 350001084. 500m East of Marshall Rd.
6.40 km

The width of each Road Segment is proportional to its AADT.

2.17 km
Start Point 350000164. Capricorn Hwy to Alpha @ Tyson Rd.

43.30 km
End Point 350000037. Cap Hwy to Alpha@Anakie-Sapphire Rd.

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A	-2.80%	-2.83%	-0.71%
B	-2.75%	-2.97%	-0.79%

All Vehicles (00)

G	615	100%
A	624	100%
B	1,239	100%

Light Vehicles (0A)

G	477	77.56%
A	504	80.77%
B	981	79.18%

Heavy Vehicles (0B)

G	138	22.44%
A	120	19.23%
B	258	20.82%

Short Vehicles (1A)

G	477	77.56%
A	504	80.77%
B	981	79.18%

Trucks and Buses (1B)

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A	22	3.53%
B	43	3.47%

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B	914	73.77%

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A	30	4.81%
B	67	5.41%

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A	66	10.58%
B	147	11.86%

3-Axle Trucks and Buses (2D)

G	7	1.14%
A	7	1.12%
B	14	1.13%

4-Axle Trucks (2E)

G	4	0.65%
A	4	0.64%
B	8	0.65%

3-Axle Articulated (2F)

G	6	0.98%
A	4	0.64%
B	10	0.81%

4-Axle Articulated (2G)

G	8	1.30%
A	6	0.96%
B	14	1.13%

5-Axle Articulated (2H)

G	1	0.16%
A	1	0.16%
B	2	0.16%

6-Axle Articulated (2I)

G	10	1.63%
A	10	1.60%
B	20	1.61%

B Double (2J)

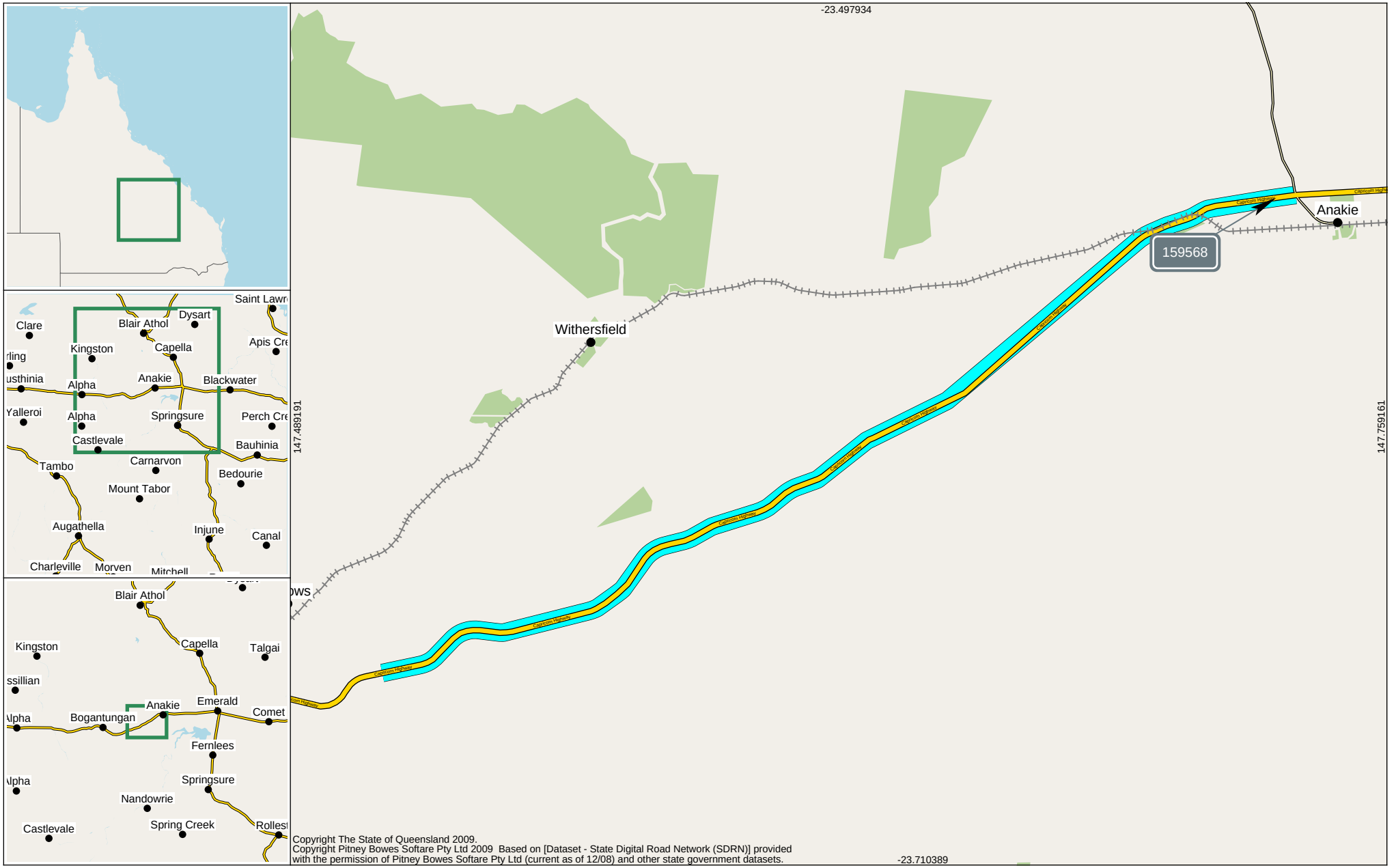
G	10	1.63%
A	11	1.76%
B	21	1.69%

Double Road Trains (2K)

G	11	1.79%
A	11	1.76%
B	22	1.78%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%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Capella
Apis Cre
Alpha
Anakie
Blackwater
Yalleroi
Springsure
Perch Cre
Castlevale
Bauhinia
Carnarvon
Tambo
Bedourie
Mount Tabor
Augathella
Injune
Canal
Charleville
Morven
Mitchell
Talgai
Emerald
Comet
Bogantungan
Fernlees
Nandowrie
Spring Creek
Rollest
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Site 159568. Point 350001053. 500m W of Int 16C/5501 on 16C.
43.80 km

The width of each Road Segment is proportional to its AADT.

43.30 km
Start Point 350000037. Cap Hwy to Alpha@Anakie-Sapphire Rd.

70.53 km
End Point 350000165. Cap Hwy to Alpha @ Willows Gemfields Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	3.45%	-6.04%	-3.53%
A	3.98%	-6.64%	-4.23%
B	3.71%	-6.35%	-3.89%

All Vehicles (00)

G	210	100%
A	209	100%
B	419	100%

Light Vehicles (0A)

G	108	51.43%
A	164	78.47%
B	272	64.92%

Heavy Vehicles (0B)

G	101	48.10%
A	45	21.53%
B	146	34.84%

Short Vehicles (1A)

G	108	51.43%
A	164	78.47%
B	272	64.92%

Trucks and Buses (1B)

G	71	33.81%
A	21	10.05%
B	92	21.96%

Articulated Vehicles (1C)

G	18	8.57%
A	10	4.78%
B	28	6.68%

Road Trains (1D)

G	12	5.71%
A	14	6.70%
B	26	6.21%

Short 2-Axle Vehicles (2A)

G	98	46.67%
A	148	70.81%
B	246	58.71%

Short Vehicles Towing (2B)

G	10	4.76%
A	16	7.66%
B	26	6.21%

2-Axle Trucks and Buses (2C)

G	67	31.90%
A	17	8.13%
B	84	20.05%

3-Axle Trucks and Buses (2D)

G	3	1.43%
A	3	1.44%
B	6	1.43%

4-Axle Trucks (2E)

G	1	0.48%
A	1	0.48%
B	2	0.48%

3-Axle Articulated (2F)

G	6	2.86%
A	1	0.48%
B	7	1.67%

4-Axle Articulated (2G)

G	5	2.38%
A	2	0.96%
B	7	1.67%

5-Axle Articulated (2H)

G	1	0.48%
A	1	0.48%
B	2	0.48%

6-Axle Articulated (2I)

G	6	2.86%
A	6	2.87%
B	12	2.86%

B Double (2J)

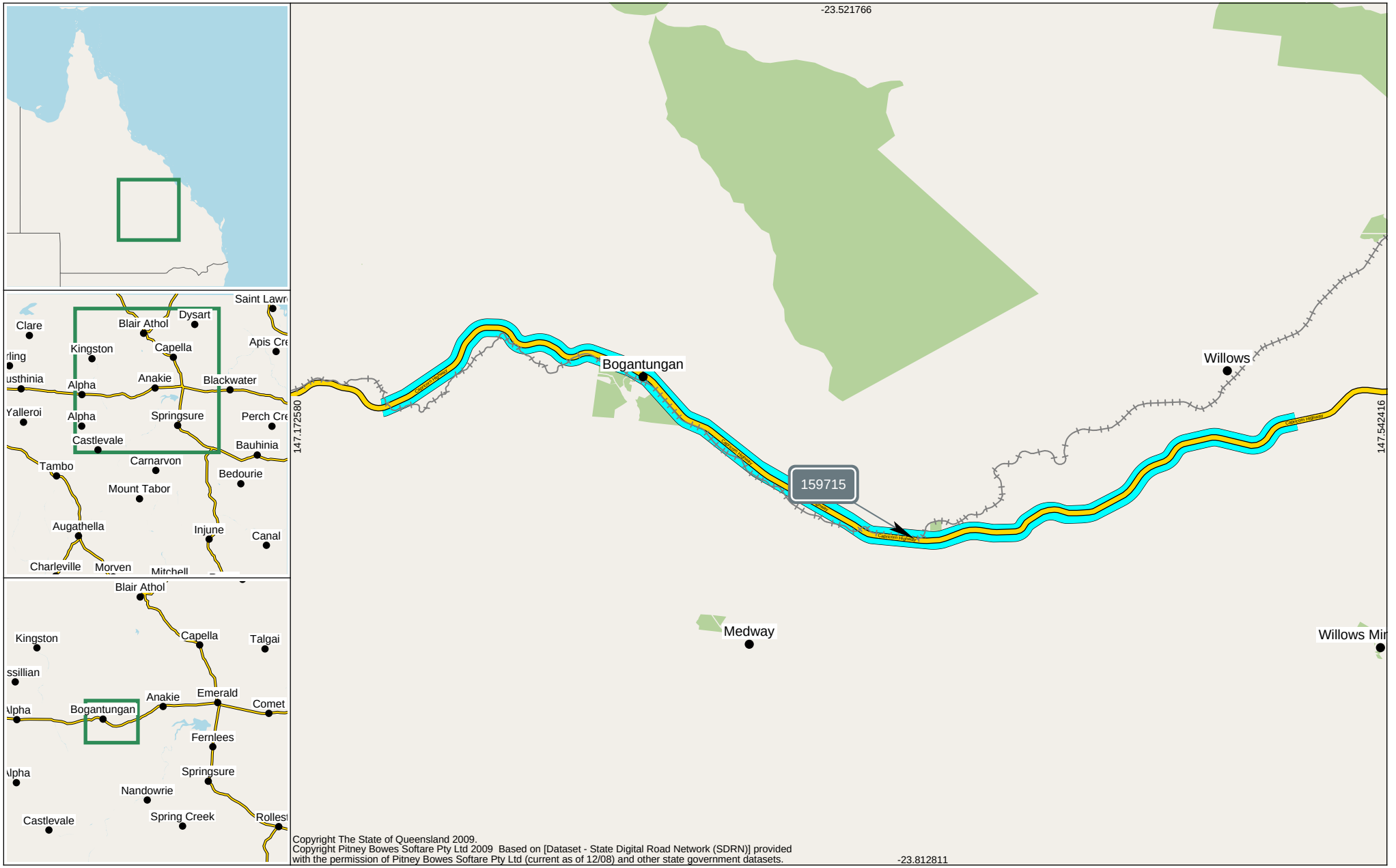
G	4	1.90%
A	5	2.39%
B	9	2.15%

Double Road Trains (2K)

G	8	3.81%
A	9	4.31%
B	17	4.06%

Triple Road Trains (2L)

G	0	0%
A	0	0%
B	0	0%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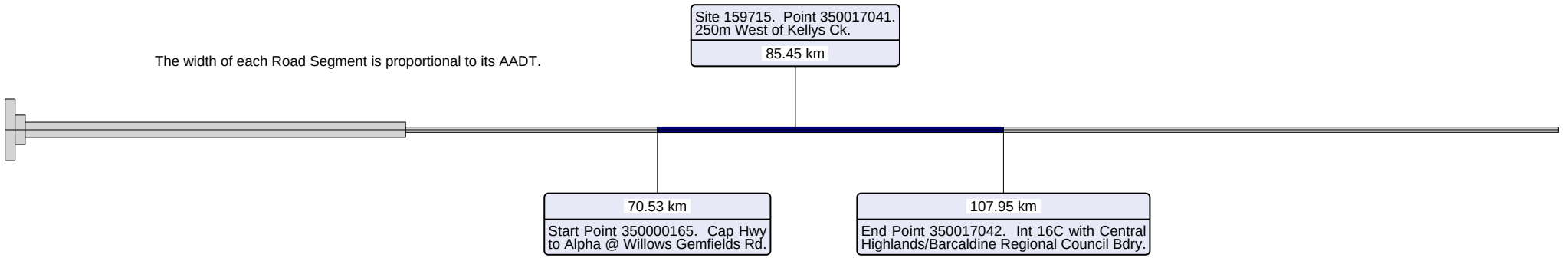
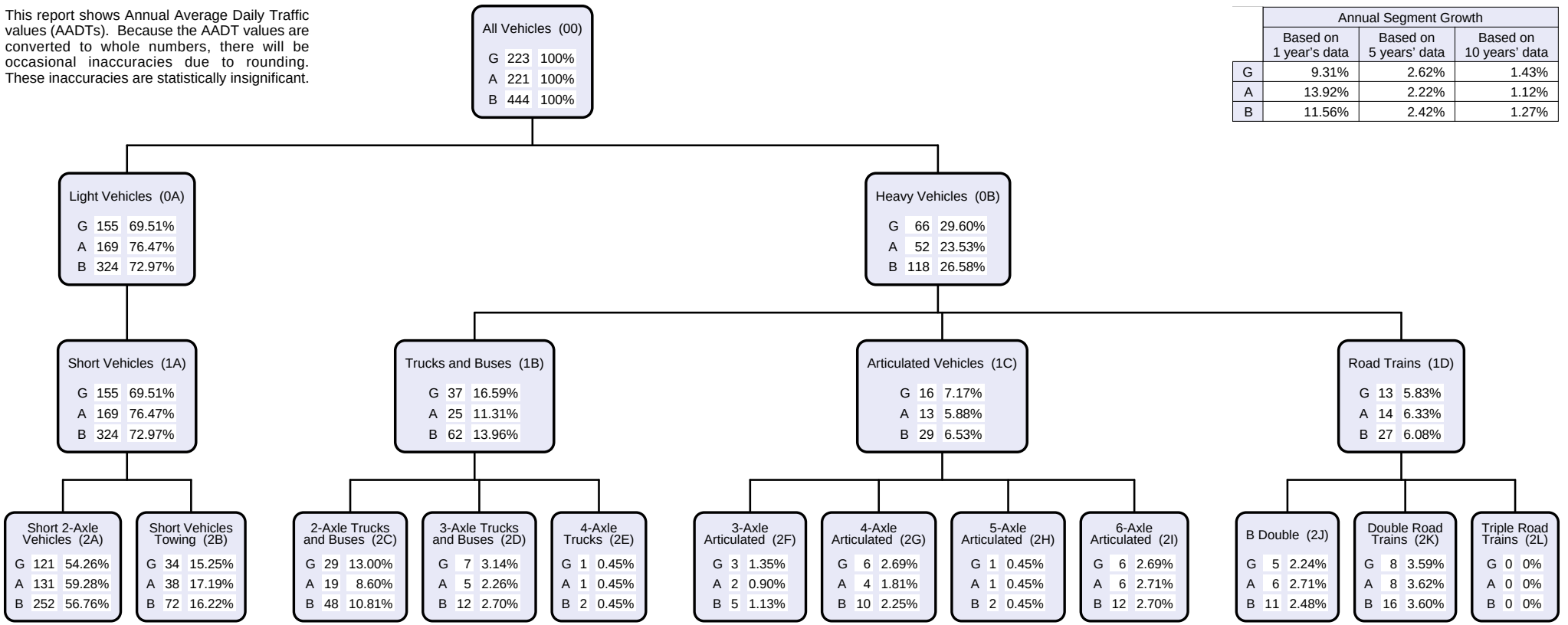
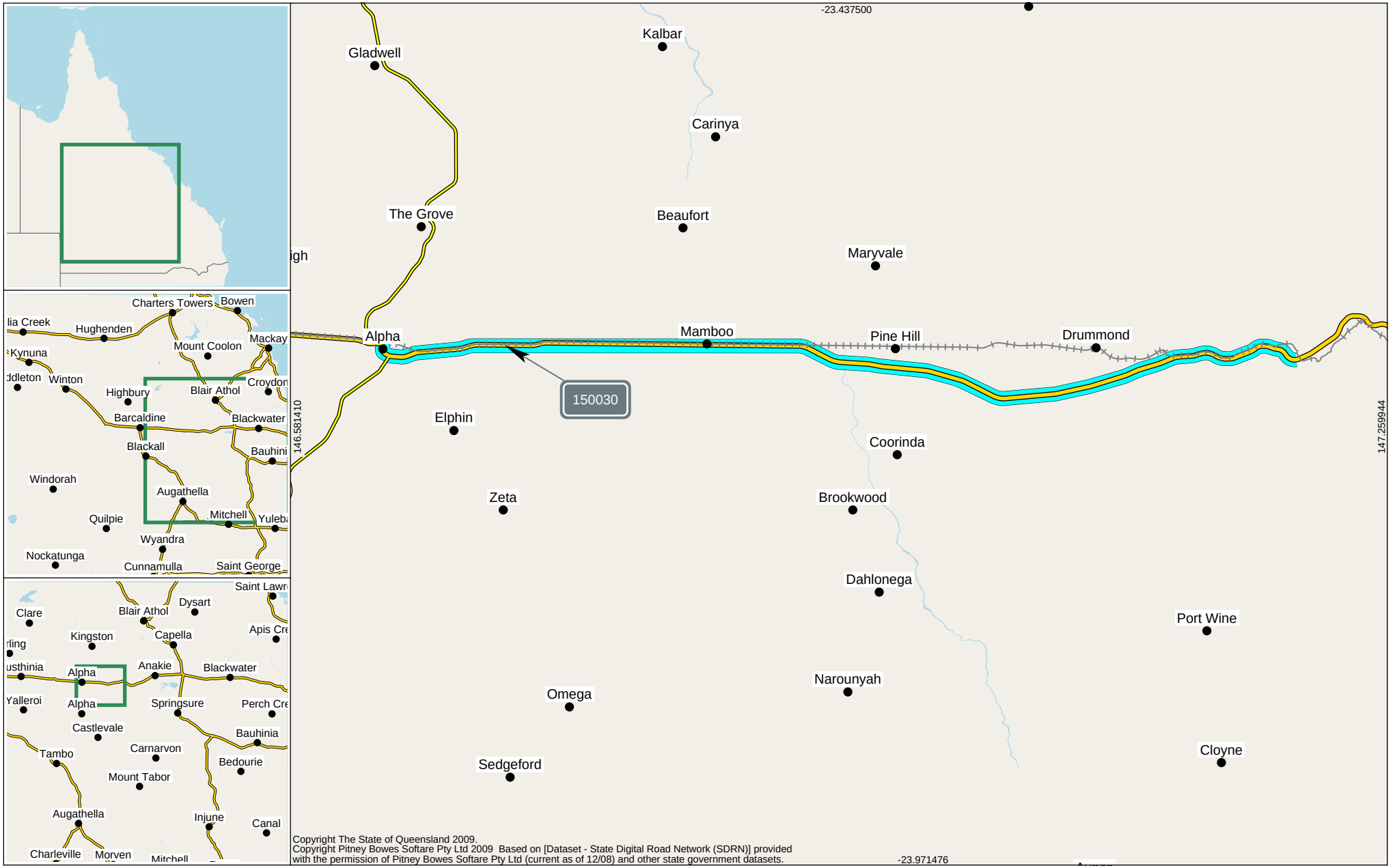
159715
Bogantungan
Willows
Medway
Willows Mir
Saint Lawr
Clare
Blair Athol
Dysart
Kingston
Capella
Apis Cre
rling
usthinia
Alpha
Anakie
Blackwater
Yalleroi
Alpha
Springsure
Perch Cre
Castlevale
Bauhinia
Carnarvon
Tambo
Bedourie
Mount Tabor
Augathella
Injune
Canal
Charleville
Morven
Mitchell
Blair Athol
Kingston
Capella
Talgai
ssillian
Anakie
Emerald
Alpha
Bogantungan
Comet
Fernlees
Springsure
Alpha
Nandowrie
Spring Creek
Castlevale
Rolles
Copyright The State of Queensland 2009.
Copyright Pitney Bowes Softare Pty Ltd 2009 Based on [Dataset - State Digital Road Network (SDRN)] provided with the permission of Pitney Bowes Softare Pty Ltd (current as of 12/08) and other state government datasets.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	9.31%	2.62%	1.43%
A	13.92%	2.22%	1.12%
B	11.56%	2.42%	1.27%

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Gladwell
Carinya
The Grove
Beaufort
Maryvale
Alpha
Mamboo
Pine Hill
Drummond
150030
Elphin
Coorinda
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Zeta
Brookwood
Dahlonega
Port Wine
Narounyah
Omega
Sedgeford
Cloyne
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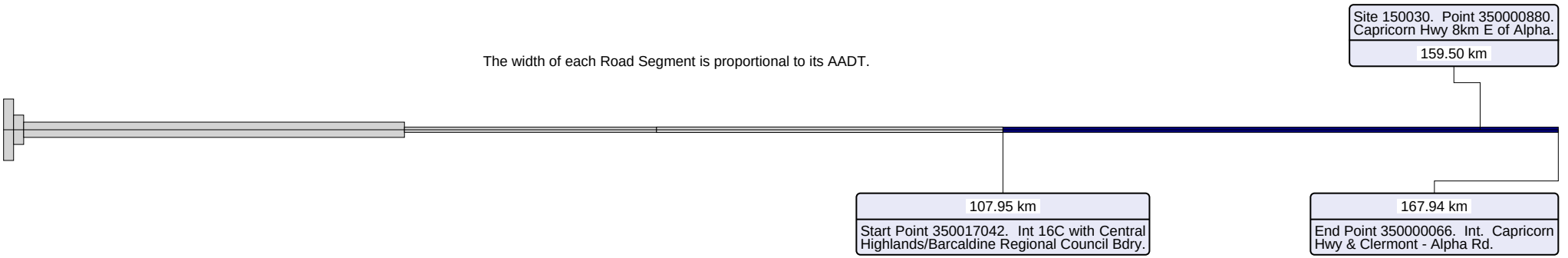
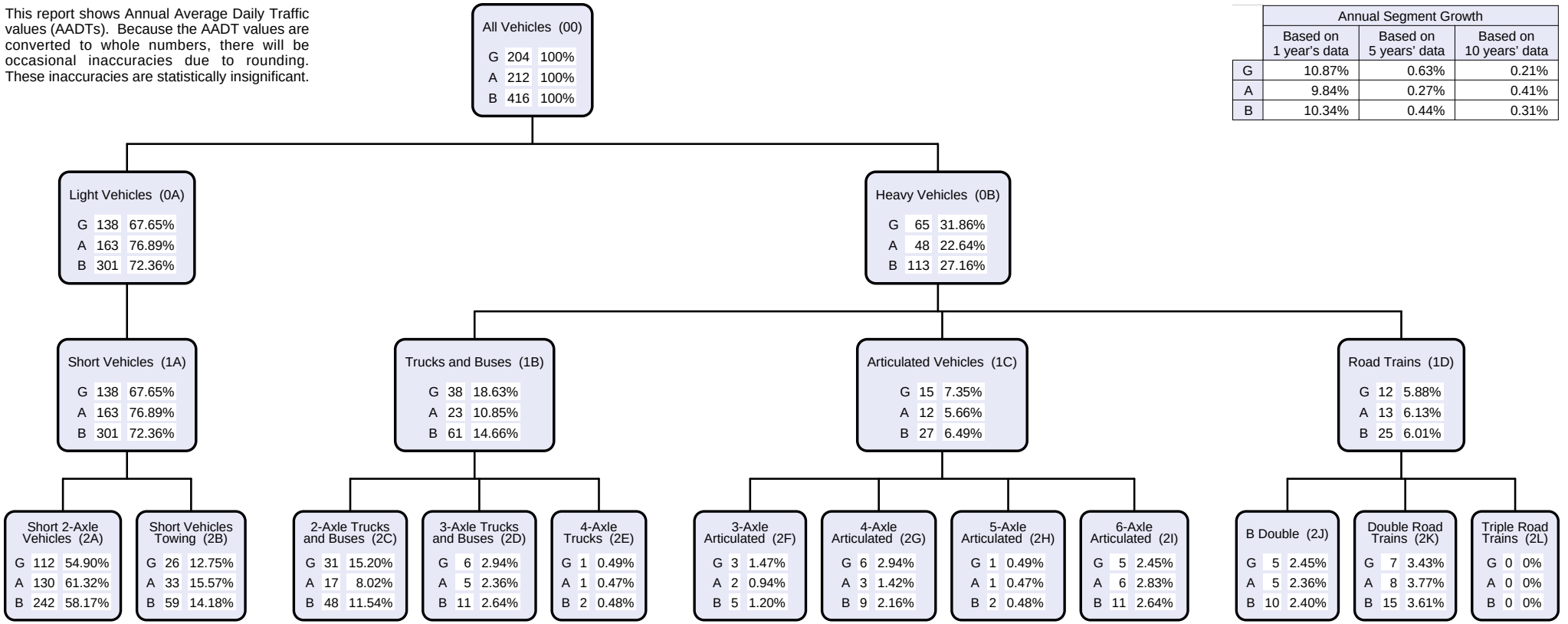
Charters Towers
Bowen
Hughenden
Mount Coolon
Mackay
Winton
Highbury
Blair Athol
Croydon
Barcaldine
Blackwater
Blackall
Bauhinia
Windorah
Augathella
Quilpie
Mitchell
Wyandra
Nockatunga
Cunnamulla
Saint George
Clare
Dysart
Kingston
Capella
Anakie
Springsure
Castlevale
Carnarvon
Tambo
Bedourie
Mount Tabor
Injune
Canal
Charleville
Morven
Copyright The State of Queensland 2009.
Copyright Pitney Bowes Softare Pty Ltd 2009 Based on [Dataset - State Digital Road Network (SDRN)] provided with the permission of Pitney Bowes Softare Pty Ltd (current as of 12/08) and other state government datasets.

The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

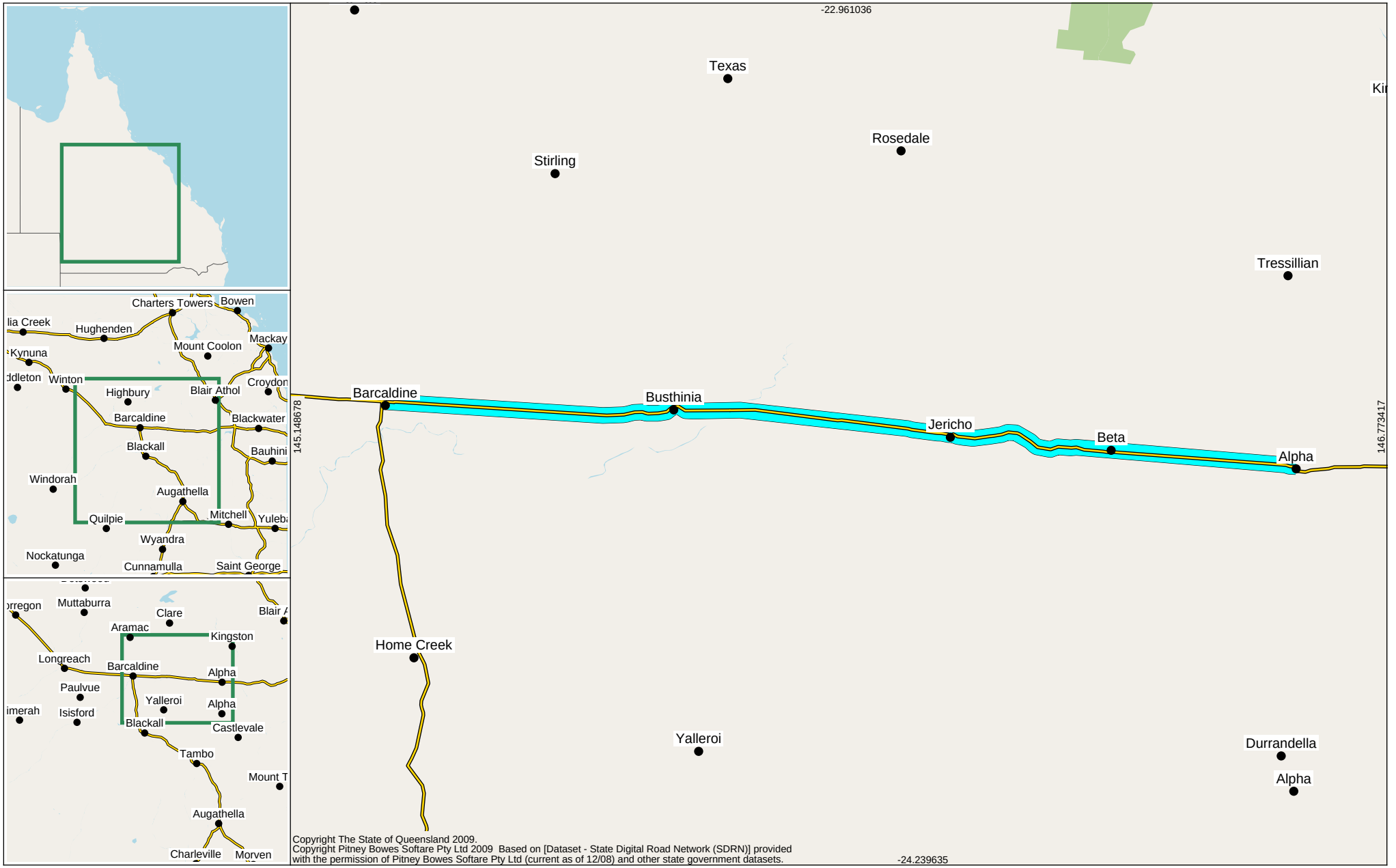
	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	10.87%	0.63%	0.21%
A	9.84%	0.27%	0.41%
B	10.34%	0.44%	0.31%



AADT Segment Analysis Report (Complete)

Road Section 16D - CAPRICORN HIGHWAY (ALPHA - BARCALDINE)

Traffic Year 2017



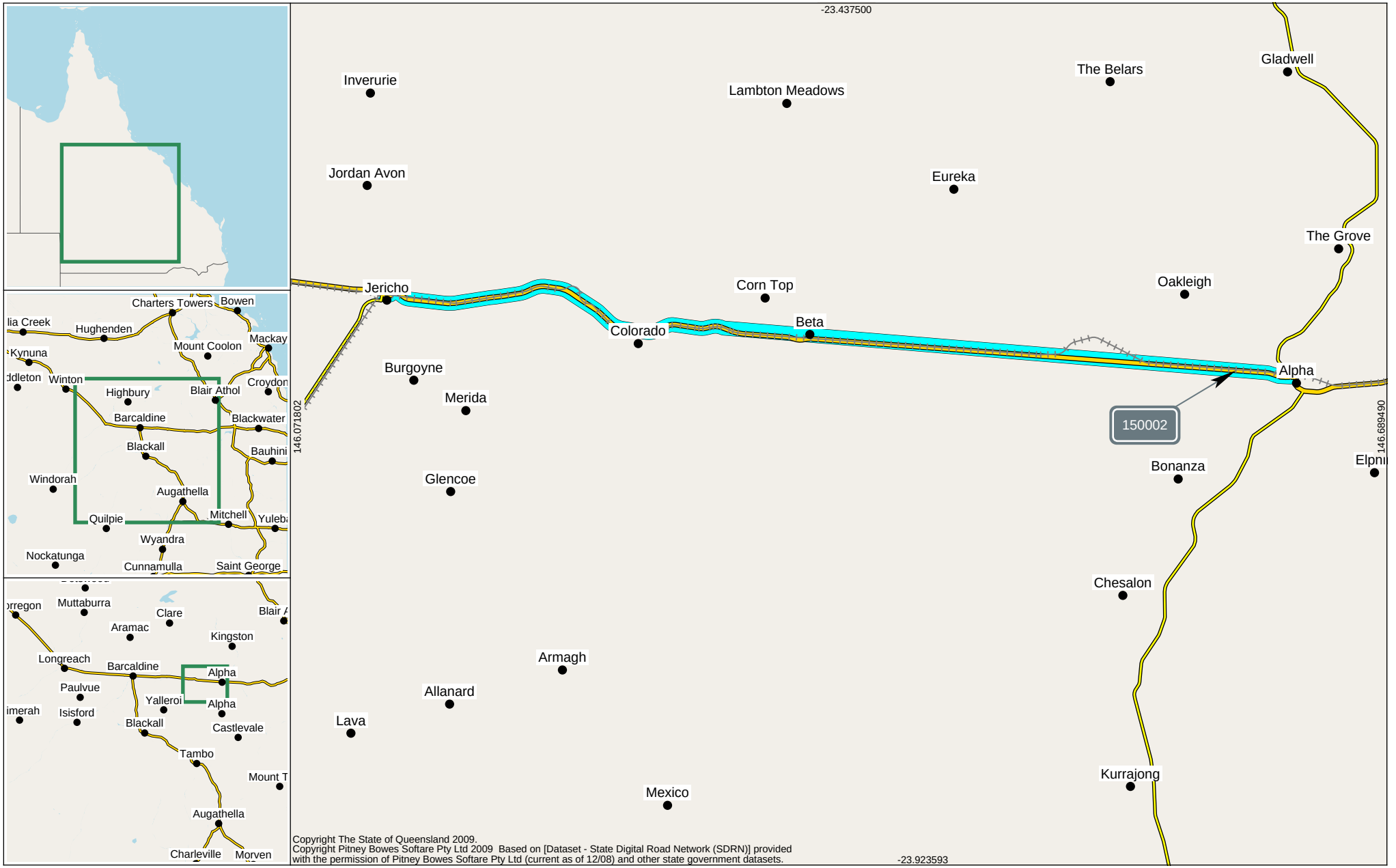
Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
401	0.000 km	54.270 km	150002	3.500 km	Capricorn Hwy 16D 3.5km West of Alpha	189	205	394	3.74382	4.06075	7.80457	2017	2
401	54.270 km	80.650 km	150003	64.270 km	Capricorn Hwy 16D 10km West of Jericho	157	167	324	1.51171	1.60799	3.11970	2017	3
401	80.650 km	140.490 km	70007	134.740 km	5.75km east of Barcaldine	184	194	378	4.01885	4.23727	8.25612	2017	4
								Totals	9.27438	9.90602	19.18039		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

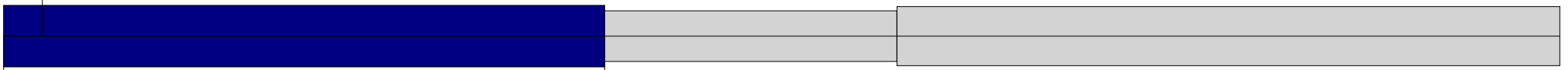
Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
401	0.000 km	54.270 km	150002	3.500 km	Capricorn Hwy 16D 3.5km West of Alpha	54	28.57%	65	31.71%	119	30.20%	1.06966	1.28756	2.35722	2017	2
401	54.270 km	80.650 km	150003	64.270 km	Capricorn Hwy 16D 10km West of Jericho	49	31.21%	35	20.96%	84	25.93%	0.47181	0.33700	0.80881	2017	3
401	80.650 km	140.490 km	70007	134.740 km	5.75km east of Barcaldine	43	23.37%	77	39.69%	120	31.75%	0.93919	1.68180	2.62099	2017	4
											Totals	2.48066	3.30636	5.78702		



Site 150002. Point 350001089. Capricorn Hwy 16D 3.5km West of Alpha.

3.50 km

The width of each Road Segment is proportional to its AADT.



0.00 km

Start Point 350000004. Cap Hwy to Barcaldine @ Clerm-Alpha Rd.

54.27 km

End Point 350000005. Int. Capricorn Hwy & Blackall-Jericho Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	11.83%	-0.40%	0.02%
A	13.89%	0.83%	0.89%
B	12.89%	0.23%	0.46%

All Vehicles (00)

G	189	100%
A	205	100%
B	394	100%

Light Vehicles (0A)

G	135	71.43%
A	139	67.80%
B	274	69.54%

Heavy Vehicles (0B)

G	54	28.57%
A	65	31.71%
B	119	30.20%

Short Vehicles (1A)

G	135	71.43%
A	139	67.80%
B	274	69.54%

Trucks and Buses (1B)

G	31	16.40%
A	36	17.56%
B	67	17.01%

Articulated Vehicles (1C)

G	12	6.35%
A	17	8.29%
B	29	7.36%

Road Trains (1D)

G	11	5.82%
A	12	5.85%
B	23	5.84%

Short 2-Axle Vehicles (2A)

G	107	56.61%
A	110	53.66%
B	217	55.08%

Short Vehicles Towing (2B)

G	28	14.81%
A	29	14.15%
B	57	14.47%

2-Axle Trucks and Buses (2C)

G	25	13.23%
A	30	14.63%
B	55	13.96%

3-Axle Trucks and Buses (2D)

G	5	2.65%
A	5	2.44%
B	10	2.54%

4-Axle Trucks (2E)

G	1	0.53%
A	1	0.49%
B	2	0.51%

3-Axle Articulated (2F)

G	2	1.06%
A	4	1.95%
B	6	1.52%

4-Axle Articulated (2G)

G	4	2.12%
A	6	2.93%
B	10	2.54%

5-Axle Articulated (2H)

G	1	0.53%
A	1	0.49%
B	2	0.51%

6-Axle Articulated (2I)

G	5	2.65%
A	6	2.93%
B	11	2.79%

B Double (2J)

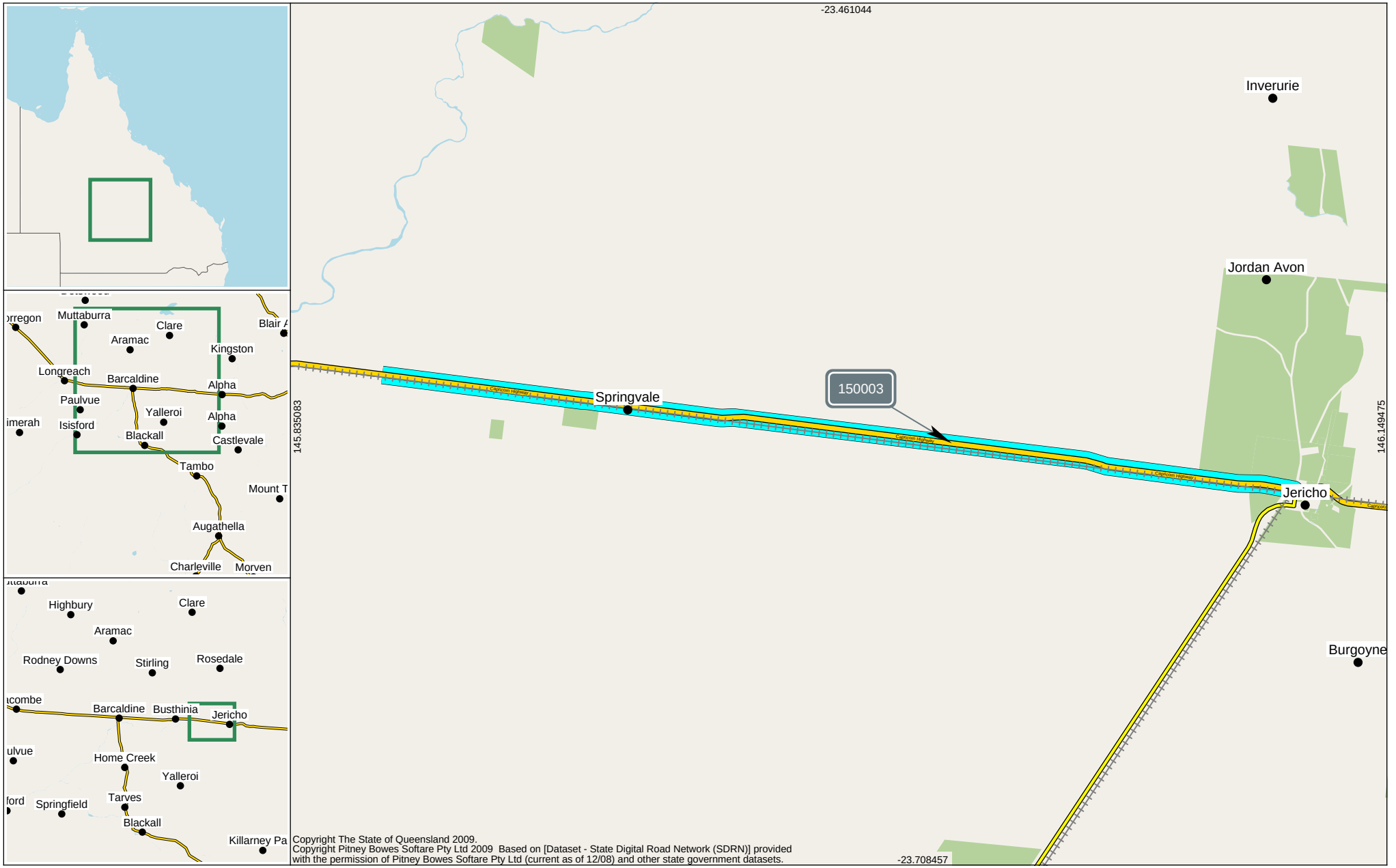
G	4	2.12%
A	4	1.95%
B	8	2.03%

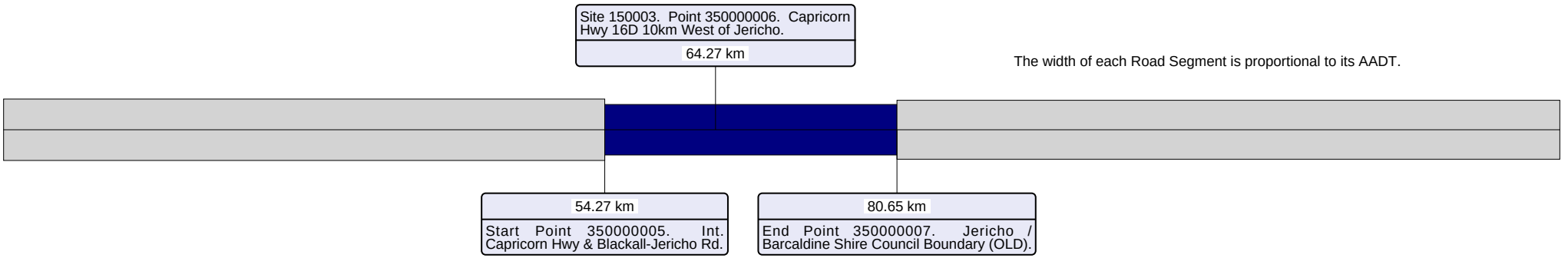
Double Road Trains (2K)

G	6	3.17%
A	7	3.41%
B	13	3.30%

Triple Road Trains (2L)

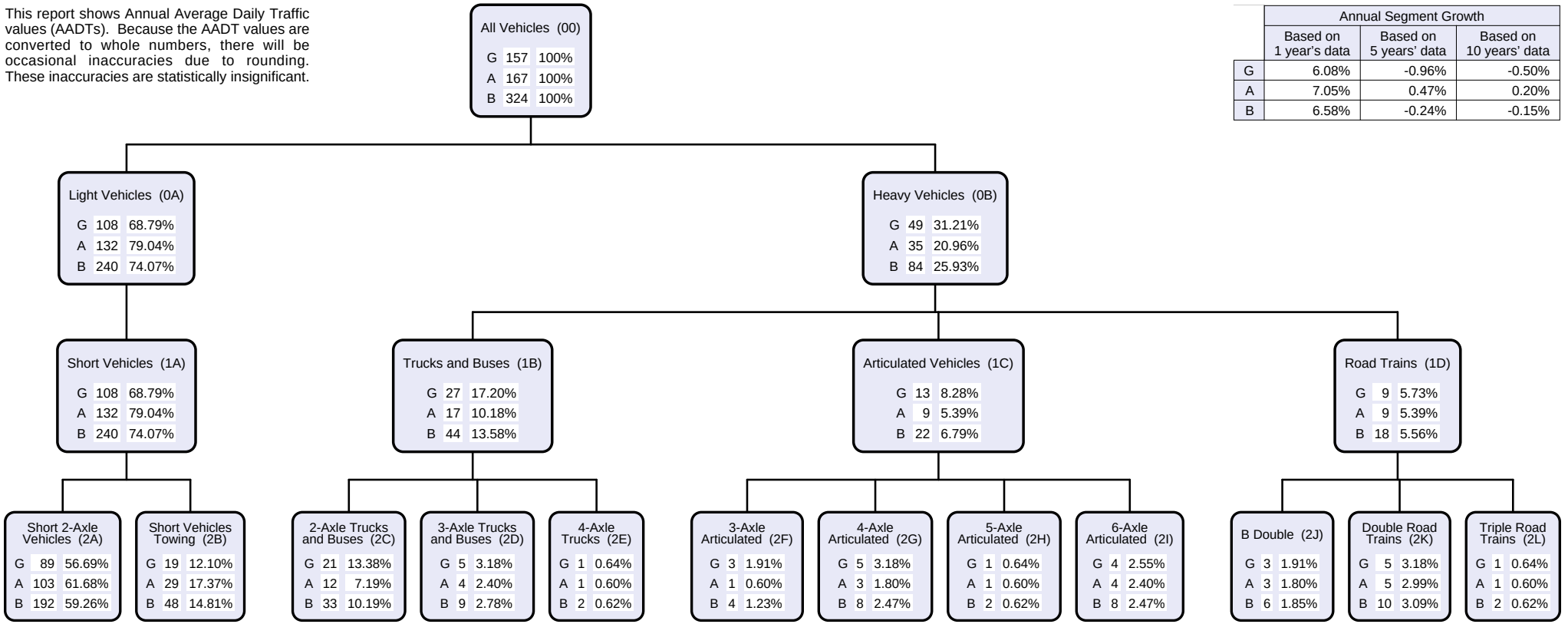
G	1	0.53%
A	1	0.49%
B	2	0.51%

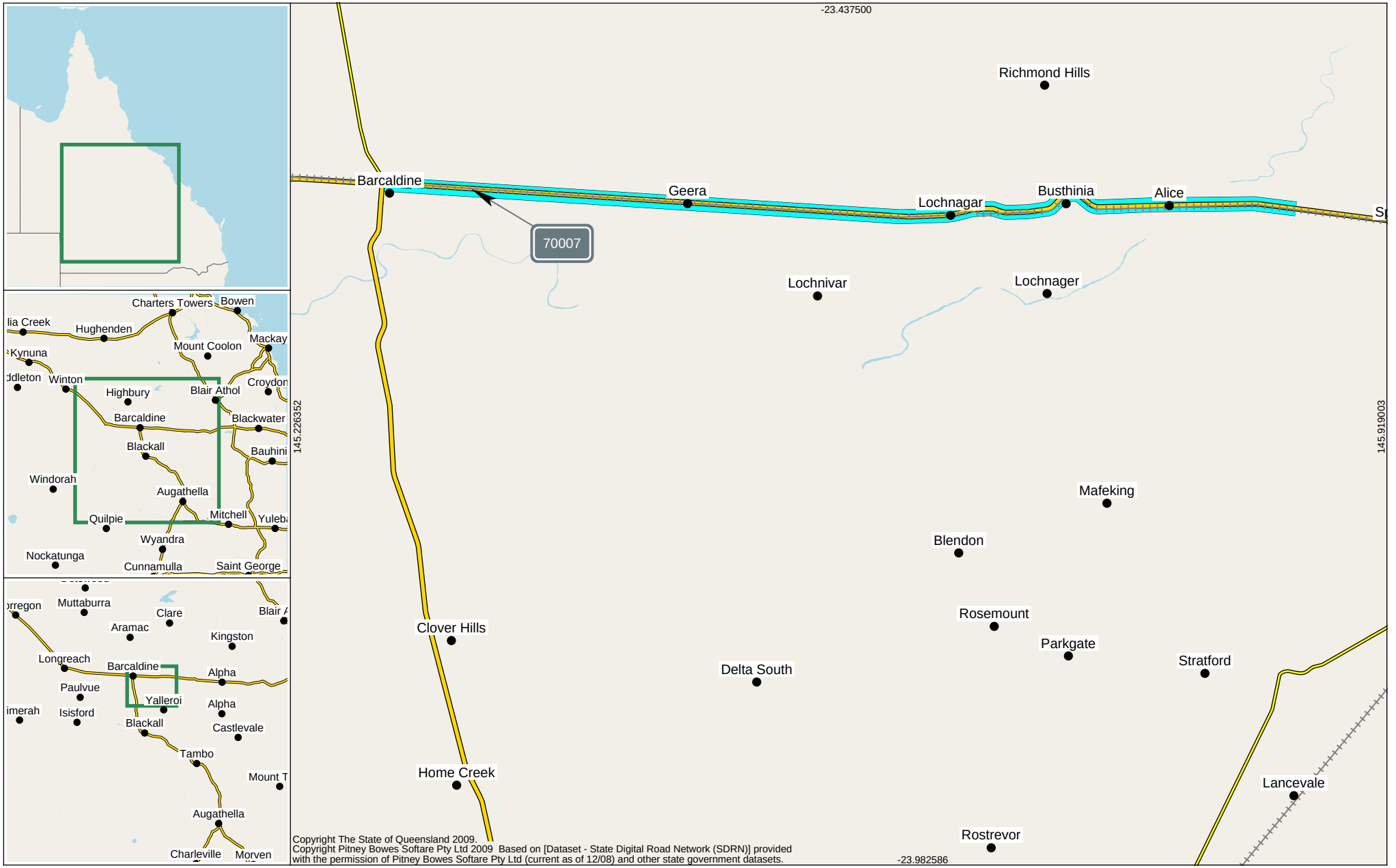




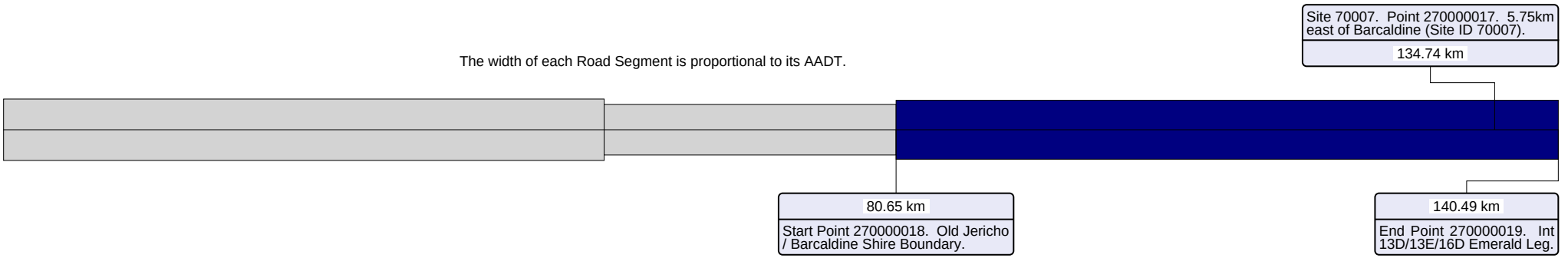
This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	6.08%	-0.96%	-0.50%
A	7.05%	0.47%	0.20%
B	6.58%	-0.24%	-0.15%





The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

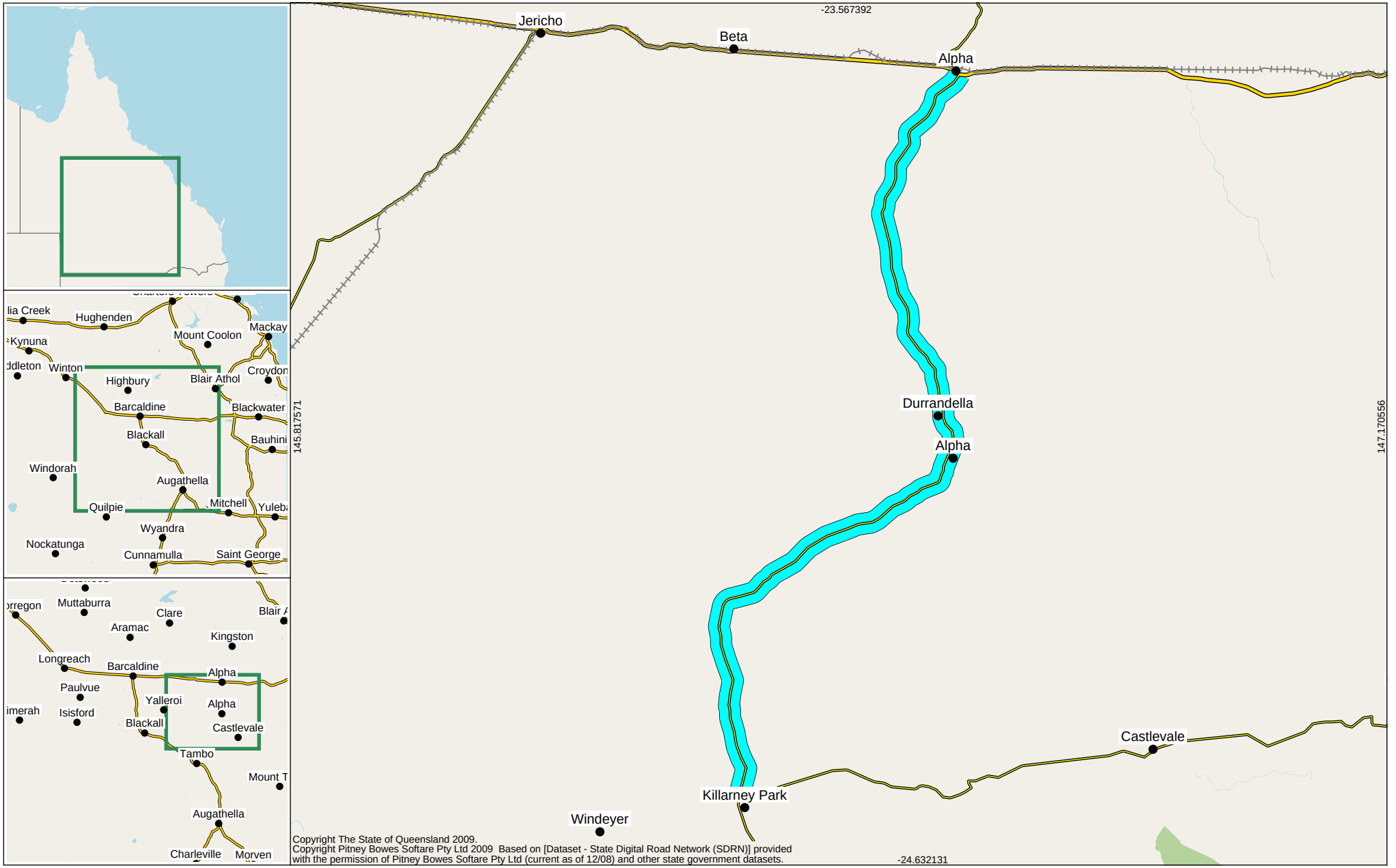
	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	-3.66%	-3.00%	-0.32%
A	-3.00%	-0.93%	0.27%
B	-3.32%	-1.97%	-0.03%

- **All Vehicles (00)**: G 184 100% | A 194 100% | B 378 100%
  - **Light Vehicles (0A)**: G 144 78.26% | A 118 60.82% | B 262 69.31%
    - **Short Vehicles (1A)**: G 144 78.26% | A 118 60.82% | B 262 69.31%
      - **Short 2-Axle Vehicles (2A)**: G 121 65.76% | A 97 50.00% | B 218 57.67%
      - **Short Vehicles Towing (2B)**: G 23 12.50% | A 21 10.82% | B 44 11.64%
  - **Heavy Vehicles (0B)**: G 43 23.37% | A 77 39.69% | B 120 31.75%
    - **Trucks and Buses (1B)**: G 21 11.41% | A 48 24.74% | B 69 18.25%
      - **2-Axle Trucks and Buses (2C)**: G 16 8.70% | A 43 22.16% | B 59 15.61%
      - **3-Axle Trucks and Buses (2D)**: G 4 2.17% | A 4 2.06% | B 8 2.12%
      - **4-Axle Trucks (2E)**: G 1 0.54% | A 1 0.52% | B 2 0.53%
    - **Articulated Vehicles (1C)**: G 10 5.43% | A 17 8.76% | B 27 7.14%
      - **3-Axle Articulated (2F)**: G 1 0.54% | A 5 2.58% | B 6 1.59%
      - **4-Axle Articulated (2G)**: G 3 1.63% | A 6 3.09% | B 9 2.38%
      - **5-Axle Articulated (2H)**: G 1 0.54% | A 1 0.52% | B 2 0.53%
      - **6-Axle Articulated (2I)**: G 5 2.72% | A 5 2.58% | B 10 2.65%
    - **Road Trains (1D)**: G 12 6.52% | A 12 6.19% | B 24 6.35%
      - **B Double (2J)**: G 4 2.17% | A 4 2.06% | B 8 2.12%
      - **Double Road Trains (2K)**: G 6 3.26% | A 6 3.09% | B 12 3.17%
      - **Triple Road Trains (2L)**: G 2 1.09% | A 2 1.03% | B 4 1.06%

AADT Segment Analysis Report (Complete)

Road Section 443 - ALPHA - TAMBO ROAD

Traffic Year 2017



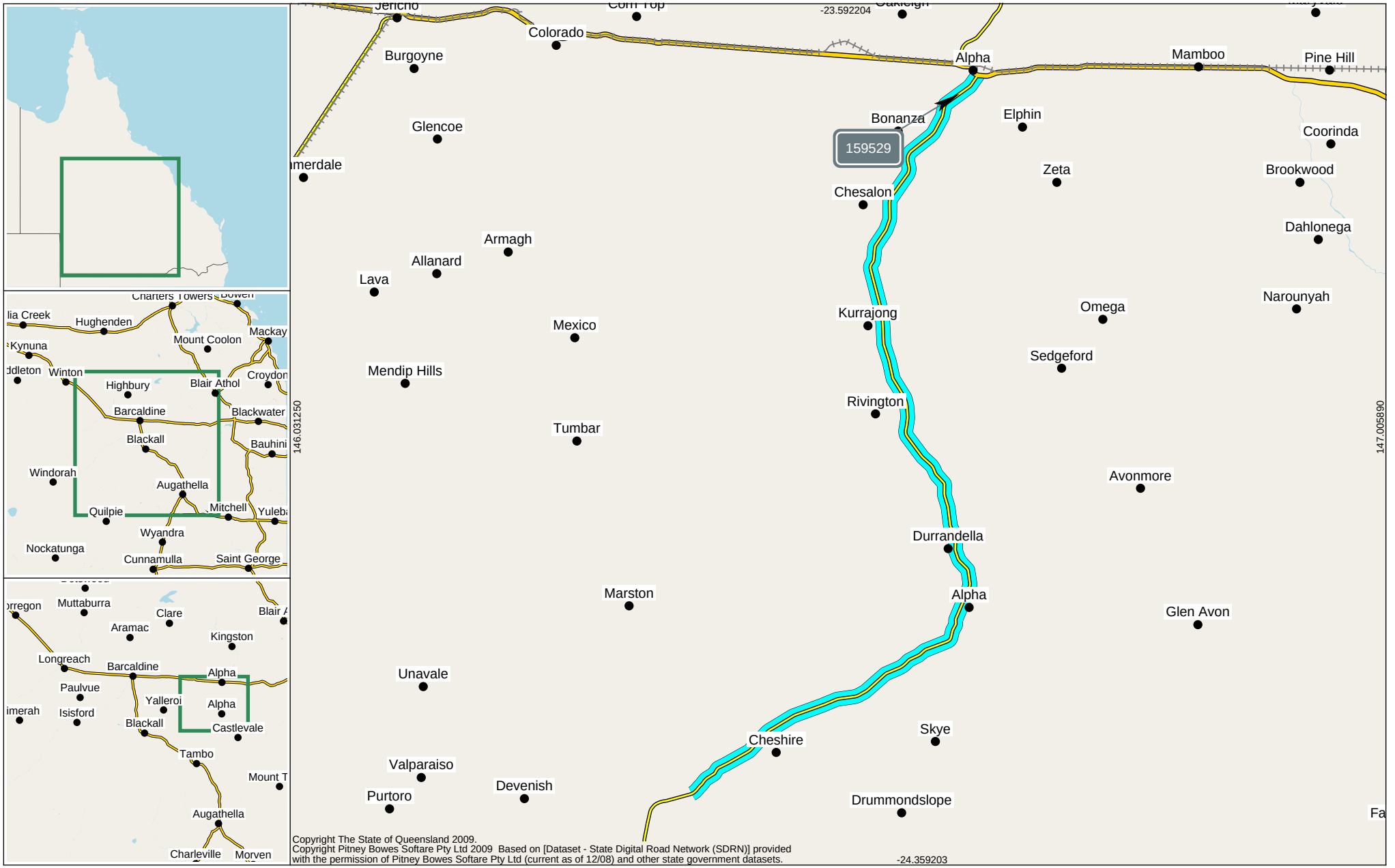
Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
401	0.000 km	90.313 km	159529	2.500 km	2.5 km South of Alpha	36	37	73	1.18671	1.21968	2.40639	2017	2
401	90.313 km	120.915 km	70061	120.270 km	650m north intersect. with springsure Rd	20	20	40	0.22339	0.22339	0.44679	2017	3
								Totals	1.41011	1.44307	2.85318		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
401	0.000 km	90.313 km	159529	2.500 km	2.5 km South of Alpha	8	22.22%	12	32.43%	20	27.40%	0.26371	0.39557	0.65928	2017	2
401	90.313 km	120.915 km	70061	120.270 km	650m north intersect. with springsure Rd	11	55.00%	11	55.00%	22	55.00%	0.12287	0.12287	0.24573	2017	3
											Totals	0.38658	0.51844	0.90502		



Site 159529. Point 350001091. 2.5km South of Alpha.

2.50 km

The width of each Road Segment is proportional to its AADT.

0.00 km

Start Point 350000233. Int. Alpha - Tambo Rd & Capricorn Hway.

90.31 km

End Point 350000234. Barcaldine / Blackall Tambo Regional Council Boundary.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	2.86%	-2.55%	1.69%
A	2.78%	-2.20%	2.06%
B	2.82%	-2.37%	1.87%

All Vehicles (00)
G 36 100%
A 37 100%
B 73 100%

Light Vehicles (0A)
G 26 72.22%
A 25 67.57%
B 51 69.86%

Heavy Vehicles (0B)
G 8 22.22%
A 12 32.43%
B 20 27.40%

Short Vehicles (1A)
G 26 72.22%
A 25 67.57%
B 51 69.86%

Trucks and Buses (1B)
G 5 13.89%
A 7 18.92%
B 12 16.44%

Articulated Vehicles (1C)
G 1 2.78%
A 2 5.41%
B 3 4.11%

Road Trains (1D)
G 2 5.56%
A 3 8.11%
B 5 6.85%

Short 2-Axle Vehicles (2A)
G 24 66.67%
A 23 62.16%
B 47 64.38%

Short Vehicles Towing (2B)
G 2 5.56%
A 2 5.41%
B 4 5.48%

2-Axle Trucks and Buses (2C)
G 4 11.11%
A 6 16.22%
B 10 13.70%

3-Axle Trucks and Buses (2D)
G 1 2.78%
A 1 2.70%
B 2 2.74%

4-Axle Trucks (2E)
G 0 0%
A 0 0%
B 0 0%

3-Axle Articulated (2F)
G 0 0%
A 0 0%
B 0 0%

4-Axle Articulated (2G)
G 0 0.00%
A 1 2.70%
B 1 1.37%

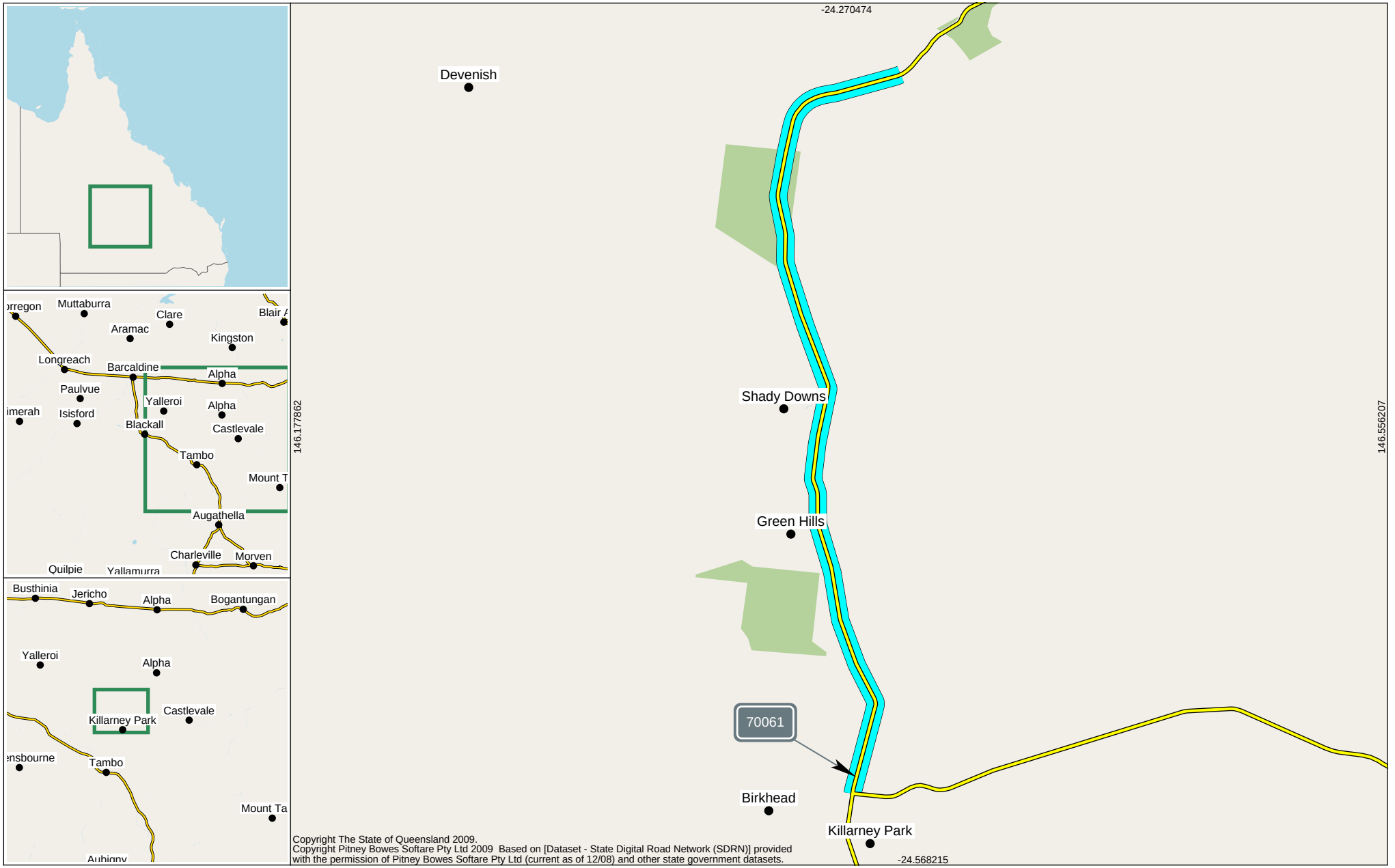
5-Axle Articulated (2H)
G 0 0%
A 0 0%
B 0 0%

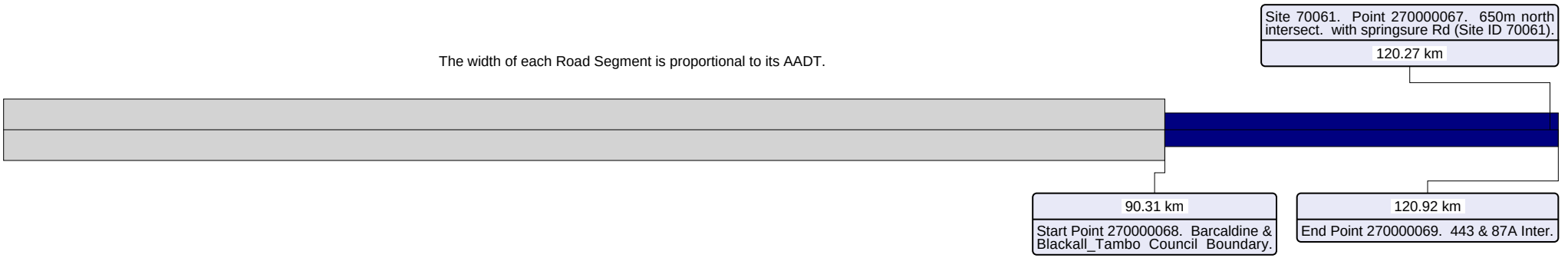
6-Axle Articulated (2I)
G 1 2.78%
A 1 2.70%
B 2 2.74%

B Double (2J)
G 0 0.00%
A 1 2.70%
B 1 1.37%

Double Road Trains (2K)
G 2 5.56%
A 2 5.41%
B 4 5.48%

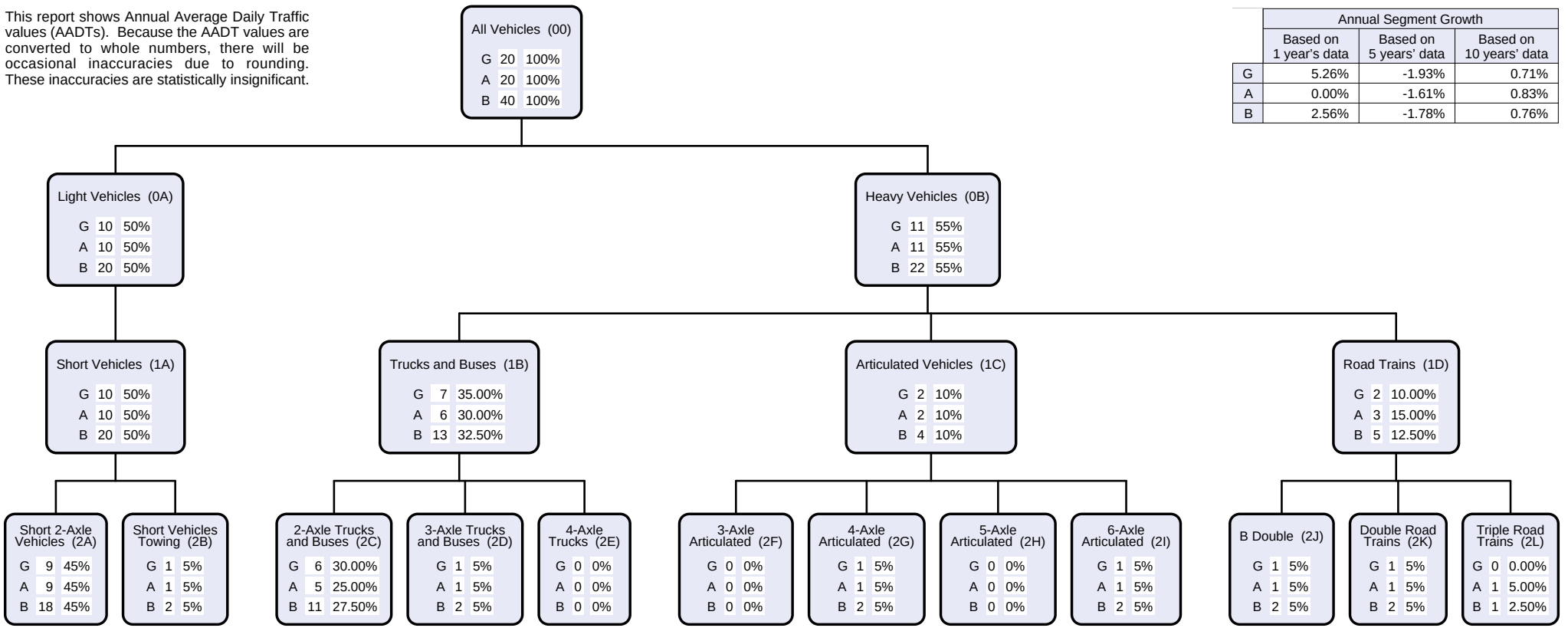
Triple Road Trains (2L)
G 0 0%
A 0 0%
B 0 0%

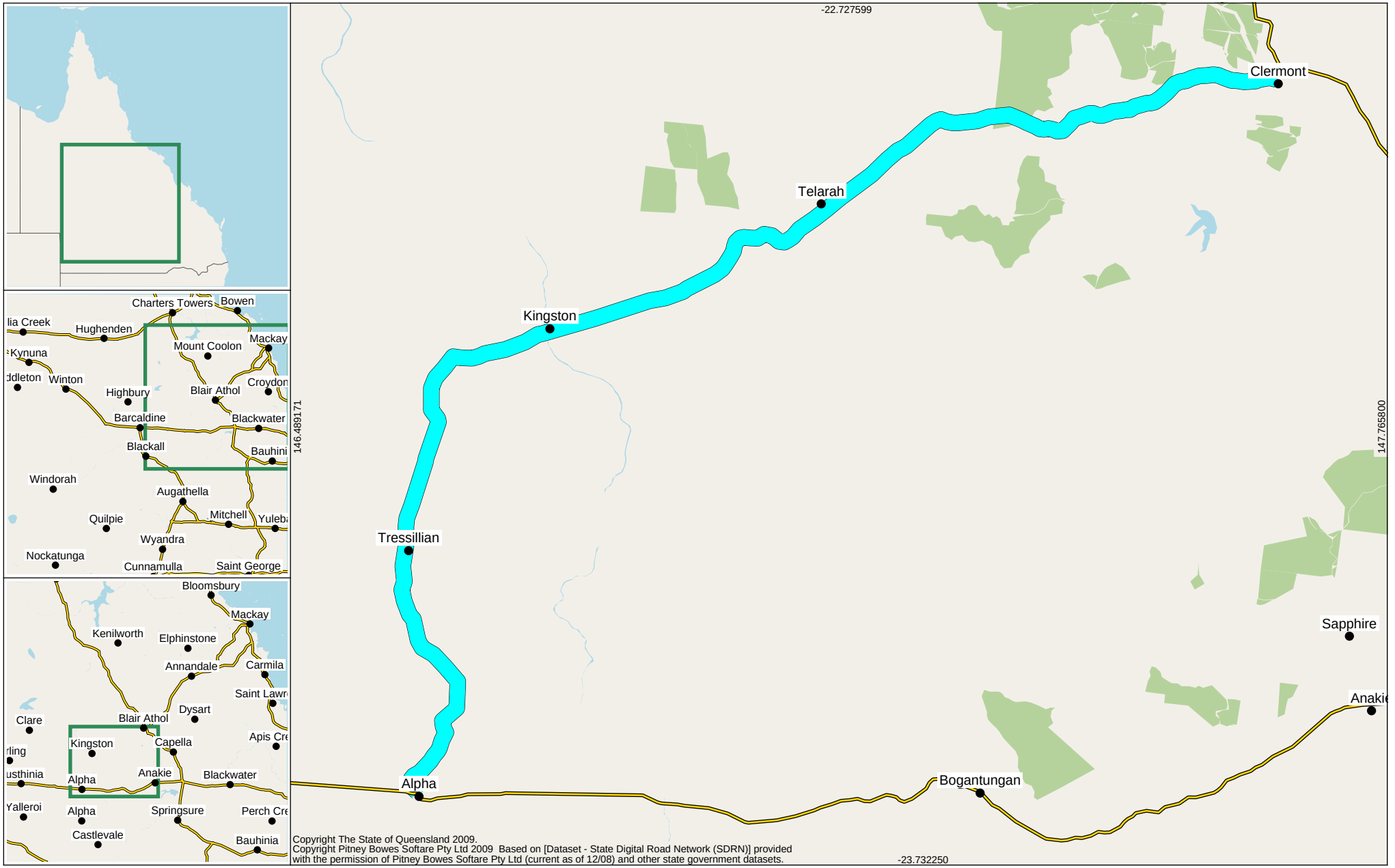




This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	5.26%	-1.93%	0.71%
A	0.00%	-1.61%	0.83%
B	2.56%	-1.78%	0.76%




-22.727599
Clermont
Telarah
Kingston
Tressillian
Alpha
Bogantungan
Sapphire
Anakie
-23.732250
146.489171
147.765800
Charters Towers
Bowen
Hughenden
Mount Coolon
Mackay
Winton
Highbury
Blair Athol
Croydon
Barcaldine
Blackwater
Blackall
Bauhinia
Windorah
Augathella
Quilpie
Mitchell
Wyandra
Nockatunga
Cunnamulla
Saint George
Bloomsbury
Kenilworth
Elphinstone
Annandale
Carmila
Dysart
Clare
Capella
Kingston
Anakie
Alpha
Springsure
Castlevale
Bauhinia
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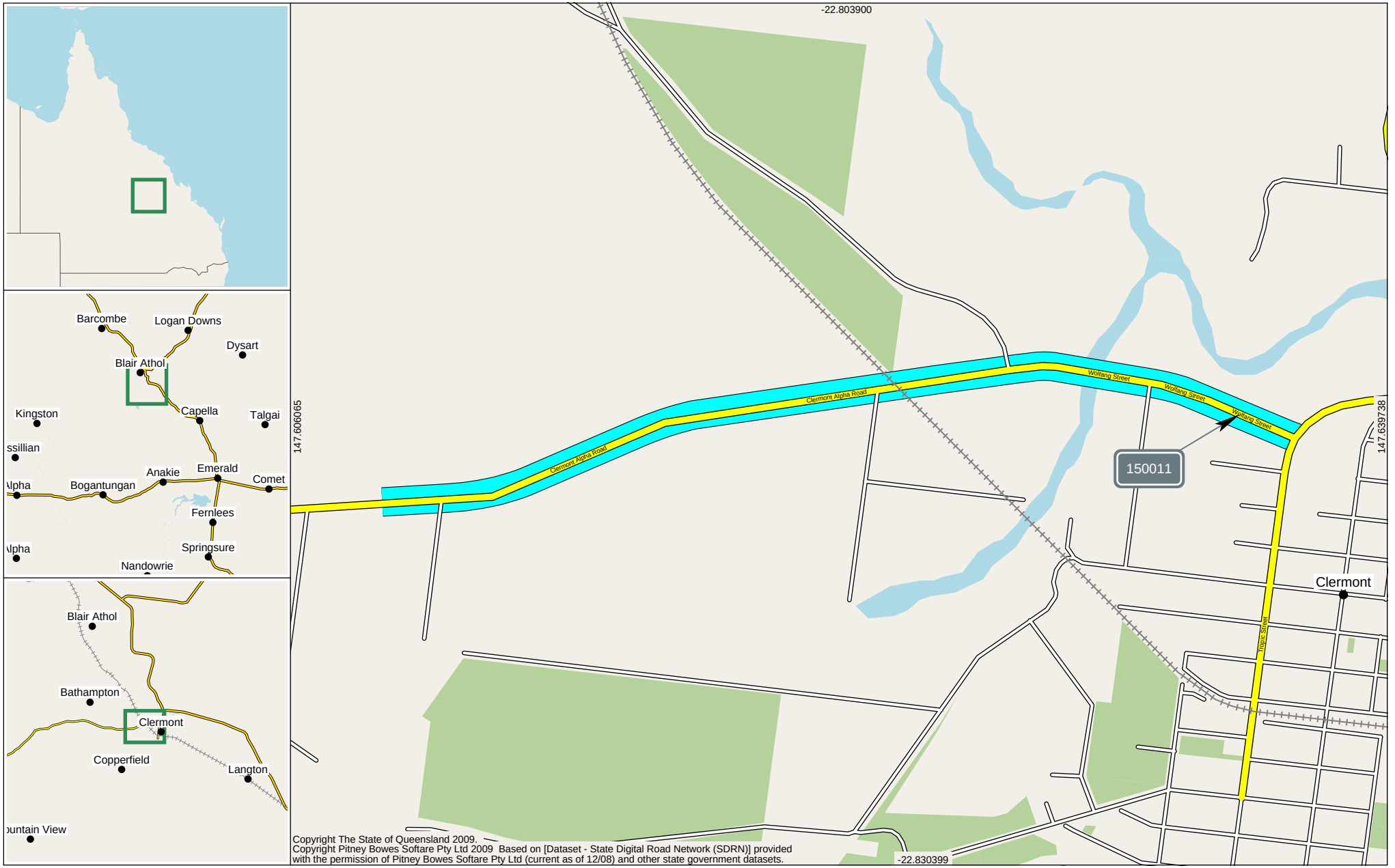
Road Segments Summary - All Vehicles

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	AADT			VKT (Millions)			Data Year	Page
						G	A	B	G	A	B		
405	0.000 km	3.000 km	150011	0.195 km	Clermont-Alpha Rd 350m W Cler Connect Rd	265	267	532	0.29018	0.29236	0.58254	2016	2
405	3.000 km	44.400 km	159563	4.620 km	Clermont Alpha Rd 4km from Clermont	66	65	131	0.99733	0.98221	1.97954	2016	3
405	44.400 km	148.600 km	159647	66.740 km	100m W of Mistake Ck State School	18	16	34	0.68459	0.60853	1.29312	2016	4
401	148.600 km	178.540 km	159564	173.850 km	Clermont Alpha Rd 5 km Nth of Alpha	33	34	67	0.36063	0.37156	0.73218	2017	5
								Totals	2.33272	2.25466	4.58739		

Road Segments Summary - Heavy Vehicles only

VKT totals are calculated only if traffic class data is available for all sites.

Region	Segment Start Tdist	Segment End Tdist	Site	Site Tdist	Description	HV AADT						HV VKT (Millions)			Data Year	Page
						G		A		B						
						AADT	HV %	AADT	HV %	AADT	HV %	G	A	B		
405	0.000 km	3.000 km	150011	0.195 km	Clermont-Alpha Rd 350m W Cler Connect Rd	47	17.74%	40	14.98%	87	16.35%	0.05146	0.04380	0.09527	2016	2
405	3.000 km	44.400 km	159563	4.620 km	Clermont Alpha Rd 4km from Clermont	14	21.21%	17	26.15%	31	23.66%	0.21155	0.25689	0.46844	2016	3
405	44.400 km	148.600 km	159647	66.740 km	100m W of Mistake Ck State School	4	22.22%	2	12.50%	6	17.65%	0.15213	0.07607	0.22820	2016	4
401	148.600 km	178.540 km	159564	173.850 km	Clermont Alpha Rd 5 km Nth of Alpha	11	33.33%	5	14.71%	16	23.88%	0.12021	0.05464	0.17485	2017	5
											Totals	0.53536	0.43139	0.96675		


-22.803900
-22.830399
147.606065
147.639738
Clermont Alpha Road
Wolfang Street
150011
Clermont
Dysart
Logan Downs
Barcombe
Blair Athol
Capella
Kingston
Talgai
Anakie
Emerald
Comet
Bogantungan
Fernlees
Springsure
Nandowrie
Bathampton
Copperfield
Langton
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Site 150011. Point 350000027. West of Clermont Connection Road.

0.20 km

The width of each Road Segment is proportional to its AADT.

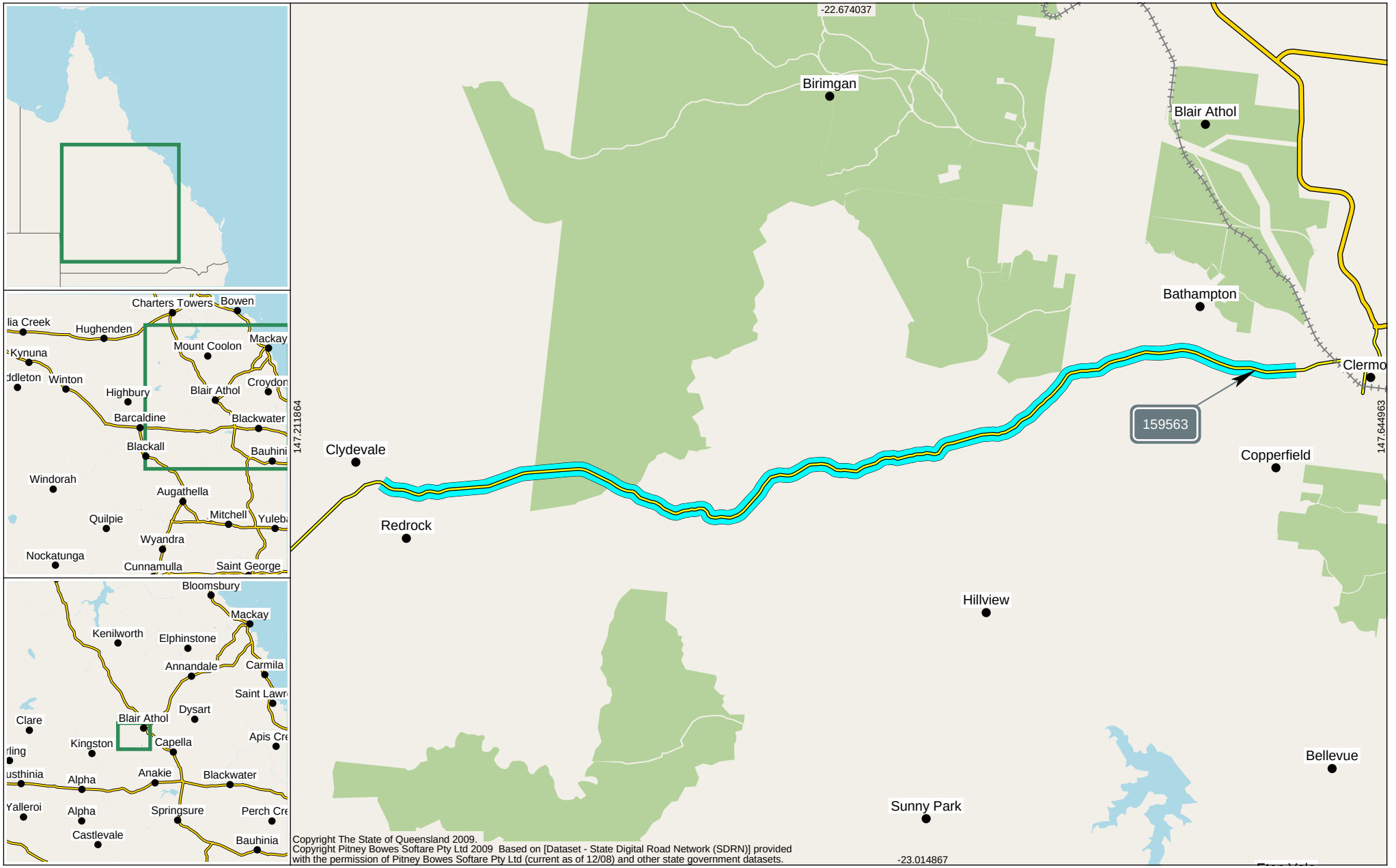
0.00 km
Start Point 350000028. Clermont-Alpha Rd @ Clermont Connection.

3.00 km
End Point 350000029.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.00%	3.02%	2.24%
A	0.00%	2.31%	2.06%
B	0.00%	2.66%	2.15%

- All Vehicles (00): G 265 100%; A 267 100%; B 532 100%
  - Light Vehicles (0A): G 220 83.02%; A 227 85.02%; B 447 84.02%
    - Short Vehicles (1A): G 220 83.02%; A 227 85.02%; B 447 84.02%
      - Short 2-Axle Vehicles (2A): G 209 78.87%; A 216 80.90%; B 425 79.89%
      - Short Vehicles Towing (2B): G 11 4.15%; A 11 4.12%; B 22 4.14%
  - Heavy Vehicles (0B): G 47 17.74%; A 40 14.98%; B 87 16.35%
    - Trucks and Buses (1B): G 37 13.96%; A 32 11.99%; B 69 12.97%
      - 2-Axle Trucks and Buses (2C): G 33 12.45%; A 28 10.49%; B 61 11.47%
      - 3-Axle Trucks and Buses (2D): G 3 1.13%; A 3 1.12%; B 6 1.13%
      - 4-Axle Trucks (2E): G 1 0.38%; A 1 0.37%; B 2 0.38%
    - Articulated Vehicles (1C): G 4 1.51%; A 4 1.50%; B 8 1.50%
      - 3-Axle Articulated (2F): G 1 0.38%; A 1 0.37%; B 2 0.38%
      - 4-Axle Articulated (2G): G 1 0.38%; A 1 0.37%; B 2 0.38%
      - 5-Axle Articulated (2H): G 1 0.38%; A 1 0.37%; B 2 0.38%
      - 6-Axle Articulated (2I): G 1 0.38%; A 1 0.37%; B 2 0.38%
    - Road Trains (1D): G 6 2.26%; A 4 1.50%; B 10 1.88%
      - B Double (2J): G 2 0.75%; A 2 0.75%; B 4 0.75%
      - Double Road Trains (2K): G 3 1.13%; A 2 0.75%; B 5 0.94%
      - Triple Road Trains (2L): G 1 0.38%; A 0 0.00%; B 1 0.19%



Site 159563. Point 350000296. 4.62 km from Clermont.

4.62 km

3.00 km
Start Point 350000029.

44.40 km
End Point 350000540. Int Clermont - Alpha Rd & Pioneer-Clydevale Rd.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.00%	7.73%	4.67%
A	0.00%	7.96%	4.26%
B	0.00%	7.84%	4.46%

All Vehicles (00)

G	66	100%
A	65	100%
B	131	100%

Light Vehicles (0A)

G	52	78.79%
A	48	73.85%
B	100	76.34%

Heavy Vehicles (0B)

G	14	21.21%
A	17	26.15%
B	31	23.66%

Short Vehicles (1A)

G	52	78.79%
A	48	73.85%
B	100	76.34%

Trucks and Buses (1B)

G	9	13.64%
A	13	20.00%
B	22	16.79%

Articulated Vehicles (1C)

G	1	1.52%
A	1	1.54%
B	2	1.53%

Road Trains (1D)

G	4	6.06%
A	3	4.62%
B	7	5.34%

Short 2-Axle Vehicles (2A)

G	49	74.24%
A	46	70.77%
B	95	72.52%

Short Vehicles Towing (2B)

G	3	4.55%
A	2	3.08%
B	5	3.82%

2-Axle Trucks and Buses (2C)

G	8	12.12%
A	12	18.46%
B	20	15.27%

3-Axle Trucks and Buses (2D)

G	1	1.52%
A	1	1.54%
B	2	1.53%

4-Axle Trucks (2E)

G	0	0%
A	0	0%
B	0	0%

3-Axle Articulated (2F)

G	0	0%
A	0	0%
B	0	0%

4-Axle Articulated (2G)

G	0	0%
A	0	0%
B	0	0%

5-Axle Articulated (2H)

G	0	0%
A	0	0%
B	0	0%

6-Axle Articulated (2I)

G	1	1.52%
A	1	1.54%
B	2	1.53%

B Double (2J)

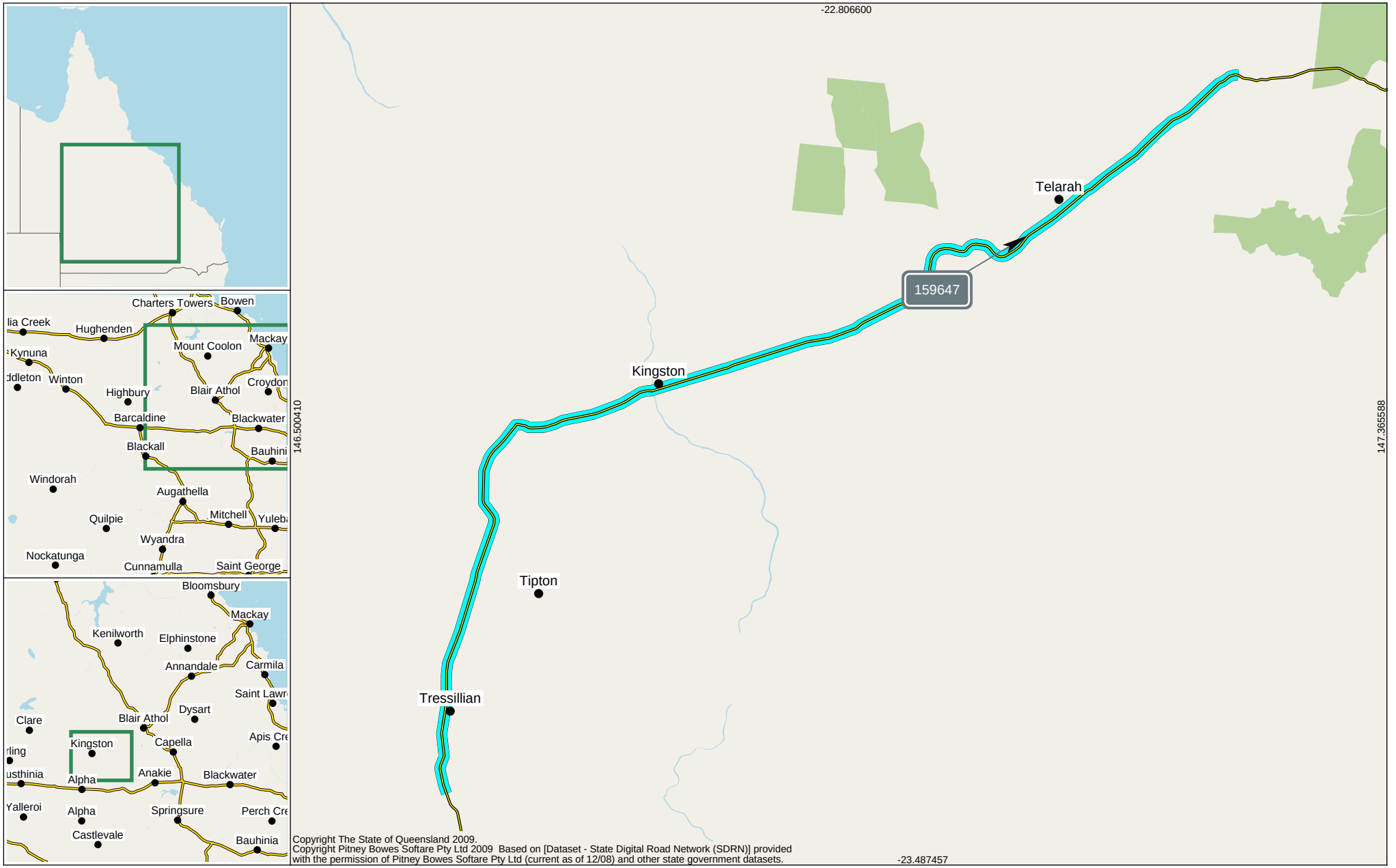
G	1	1.52%
A	1	1.54%
B	2	1.53%

Double Road Trains (2K)

G	2	3.03%
A	1	1.54%
B	3	2.29%

Triple Road Trains (2L)

G	1	1.52%
A	1	1.54%
B	2	1.53%



Site 159647. Point 350000541. 100m W of Mistake Ck State School.
66.74 km

The width of each Road Segment is proportional to its AADT.

44.40 km
Start Point 350000540. Int Clermont - Alpha Rd & Pioneer-Clydevale Rd.

148.60 km
End Point 350000211. Int. Clermont Alpha Rd & Hobartville Rd.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	0.00%	5.07%	-0.39%
A	0.00%	1.35%	-3.36%
B	0.00%	3.20%	-1.94%

All Vehicles (00)
G 18 100%
A 16 100%
B 34 100%

Light Vehicles (0A)
G 14 77.78%
A 13 81.25%
B 27 79.41%

Heavy Vehicles (0B)
G 4 22.22%
A 2 12.50%
B 6 17.65%

Short Vehicles (1A)
G 14 77.78%
A 13 81.25%
B 27 79.41%

Trucks and Buses (1B)
G 3 16.67%
A 2 12.50%
B 5 14.71%

Articulated Vehicles (1C)
G 0 0%
A 0 0%
B 0 0%

Road Trains (1D)
G 1 5.56%
A 0 0.00%
B 1 2.94%

Short 2-Axle Vehicles (2A)
G 13 72.22%
A 12 75.00%
B 25 73.53%

Short Vehicles Towing (2B)
G 1 5.56%
A 1 6.25%
B 2 5.88%

2-Axle Trucks and Buses (2C)
G 3 16.67%
A 2 12.50%
B 5 14.71%

3-Axle Trucks and Buses (2D)
G 0 0%
A 0 0%
B 0 0%

4-Axle Trucks (2E)
G 0 0%
A 0 0%
B 0 0%

3-Axle Articulated (2F)
G 0 0%
A 0 0%
B 0 0%

4-Axle Articulated (2G)
G 0 0%
A 0 0%
B 0 0%

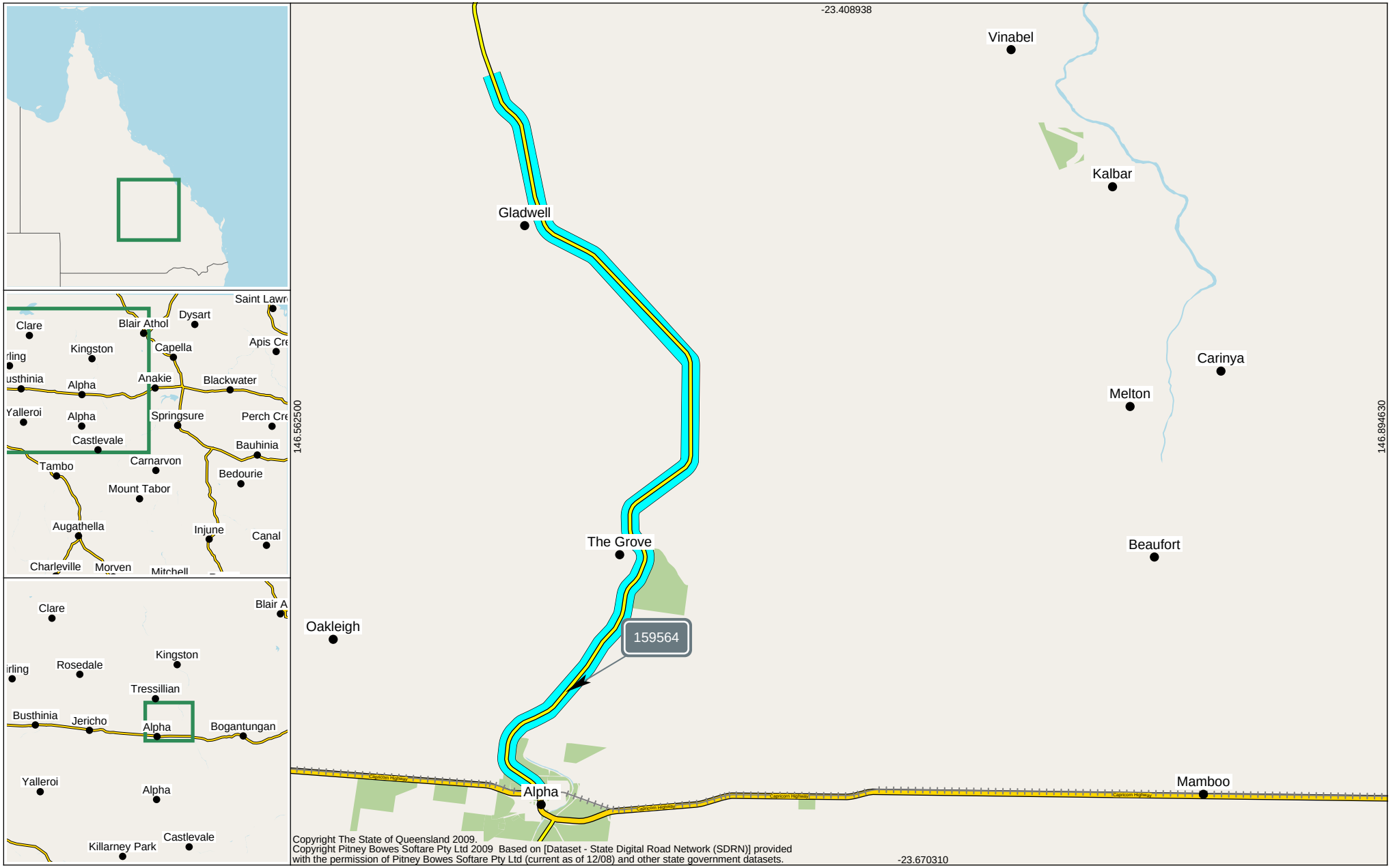
5-Axle Articulated (2H)
G 0 0%
A 0 0%
B 0 0%

6-Axle Articulated (2I)
G 0 0%
A 0 0%
B 0 0%

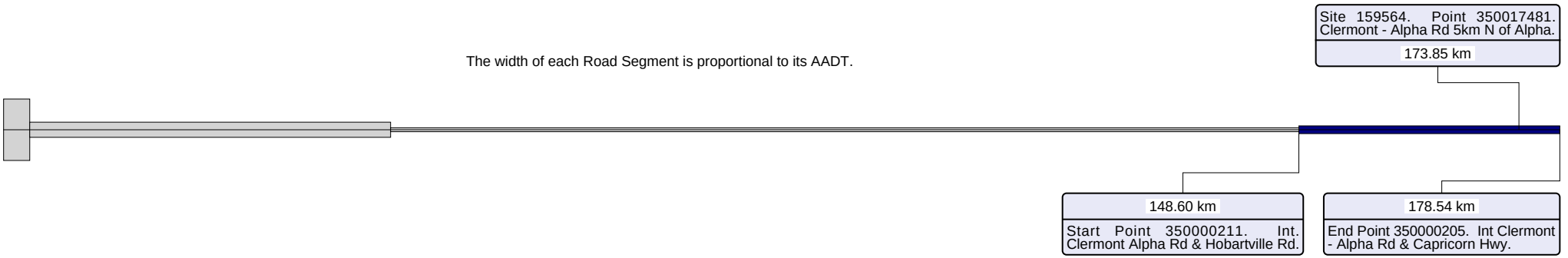
B Double (2J)
G 0 0%
A 0 0%
B 0 0%

Double Road Trains (2K)
G 1 5.56%
A 0 0.00%
B 1 2.94%

Triple Road Trains (2L)
G 0 0%
A 0 0%
B 0 0%

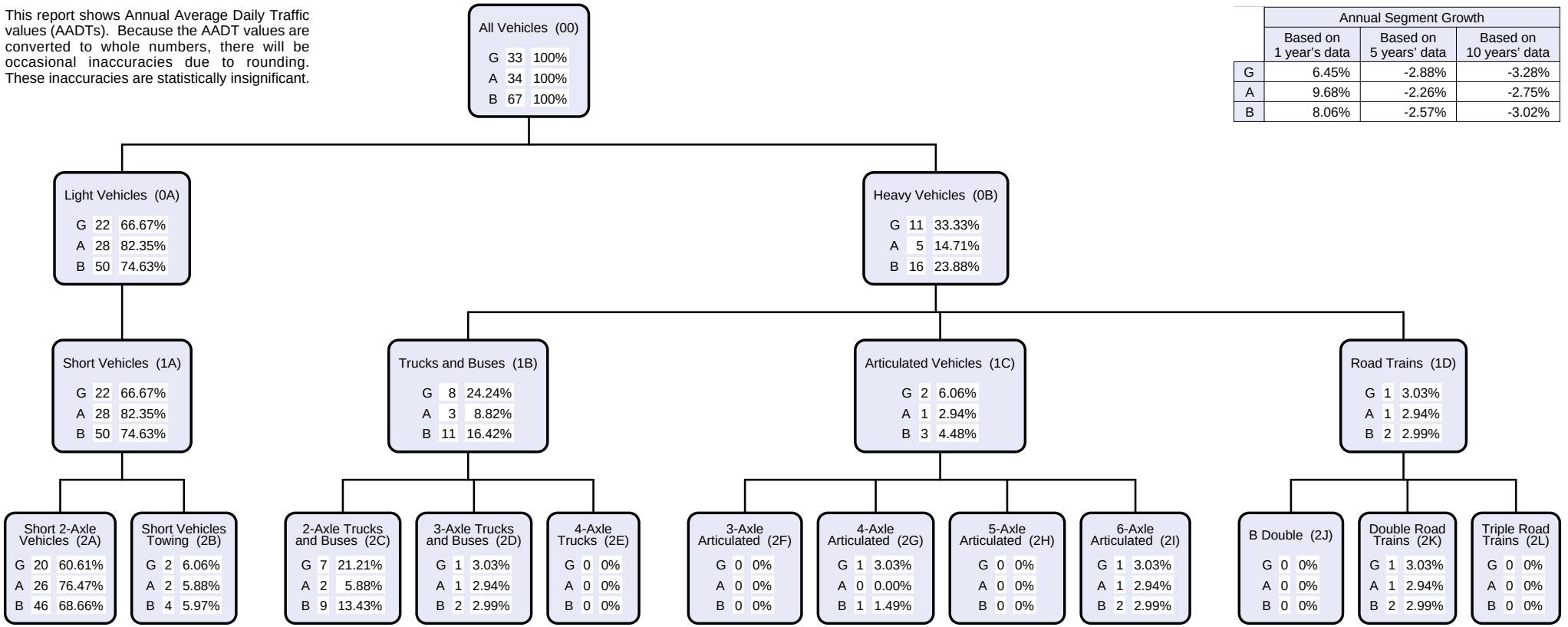


The width of each Road Segment is proportional to its AADT.



This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

	Annual Segment Growth		
	Based on 1 year's data	Based on 5 years' data	Based on 10 years' data
G	6.45%	-2.88%	-3.28%
A	9.68%	-2.26%	-2.75%
B	8.06%	-2.57%	-3.02%



Report Notes for AADT Segment Analysis Report (Complete)

AADT Segment Report

Provides AADT Segment details for a Road Section together with the traffic flow data collected at the related Site. Traffic data is reported by the start and end Through Distance of the AADT Segments on each section of road. The road segments are represented diagrammatically with AADT data including:

AADT	by direction of traffic flow
VKT	Vehicle Kilometres Travelled
%VC	Percentage Vehicle Class as per the Austroads vehicle classification scheme

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segment

Is a subdivision of a Road Section. The boundaries of an AADT Segment are it's Start Point and End Point (or Start and End Through Distance (TDist)) within the Road Section. These distances are measured in kilometres from the begining of the Road Section in Gazettal Direction. AADT Segments are determined by the traffic volume, collected at a count Site, located within the limits of each AADT Segment.

Annual Segment Growth (when displayed)

A percentage that represents the increase or decrease in AADT for the AADT Segment,using an exponential fit, calculated over a 1, 5 or 10 year period.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Data Year

The most recent year the traffic data was collected for this AADT Segment.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

G	Traffic flowing in Gazettal Direction
A	Traffic flowing against Gazettal Direction
B	The combined traffic flow in both Directions

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site TDist

The Through Distance in gazettal direction from the start of the Road Section at which the site is located.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Through Distance

The distance, in kilometres, from the beginning of the Road Section in Gazettal Direction.

Traffic Class

Is the 12 Austroads vehicle categories or classes into which vehicles are placed or binned. Traffic classes are formed in a hierarchical format.

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A
1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles.

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Vehicle Kilometres Travelled (VKT)

Daily VKT is a measure of the traffic demand. It is calculated by the length of an AADT Segment in kilometres multiplied by its AADT. The yearly VKT is the daily VKT multiplied by 365 days.

AADT Segment Summary - All Vehicles

The Total VKT can be used to gauge the demand on an entire Road Section.

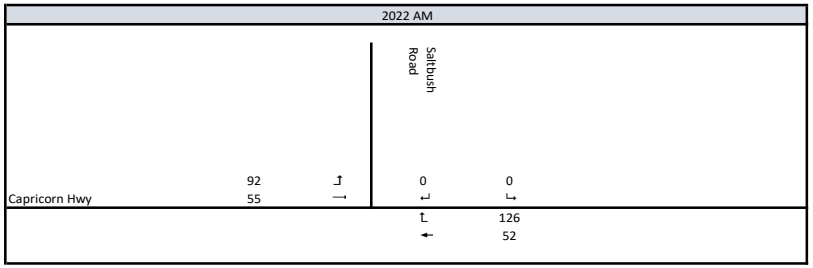
AADT Segment Summary - Heavy Vehicles only

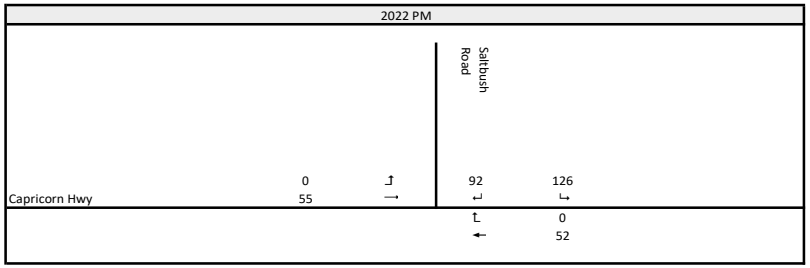
A blank field indicates that vehicle classification data was not collected for this AADT Segment.

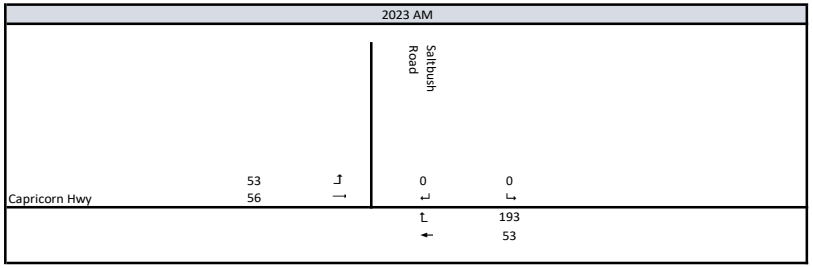
B. PEAK HOUR TRAFFIC VOLUME DIAGRAMS

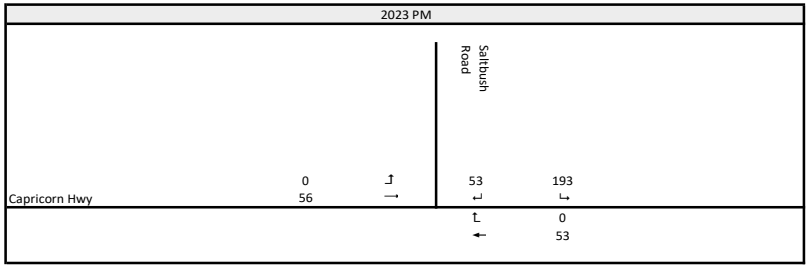
B

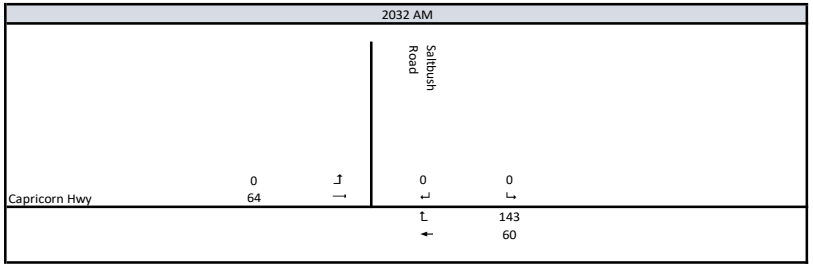
Location	Mode	2022				2023				2032				2042			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site	IN/To Site	Out/From Site
Alpha	Bus FIFO	30	0	0	30	17	0	0	17	0	0	0	0	0	0	0	0
	Bus Home	4	0	0	4	3	0	0	3	0	0	0	0	0	0	0	0
	Car	92	0	0	92	173	0	0	173	143	0	0	143	143	0	0	143
Jericho	Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Car	92	0	0	92	53	0	0	53	0	0	0	0	0	0	0	0
Total		218	0	0	218	246	0	0	246	143	0	0	143	143	0	0	143

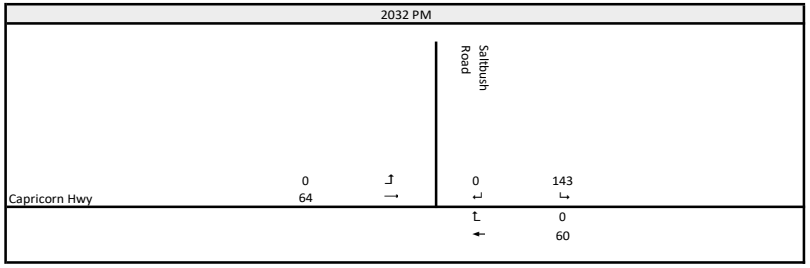


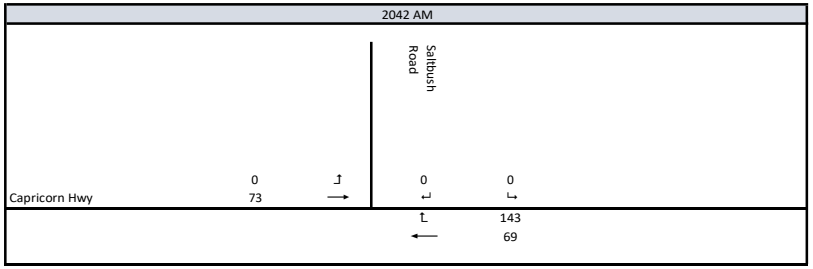


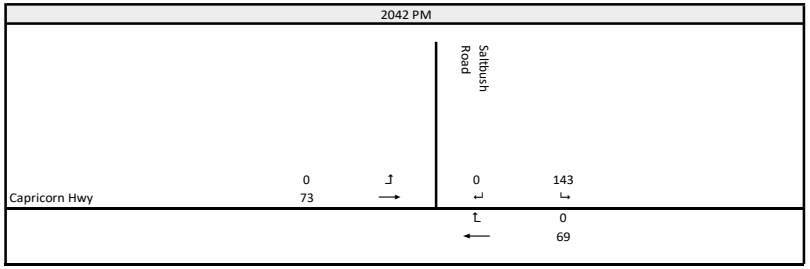










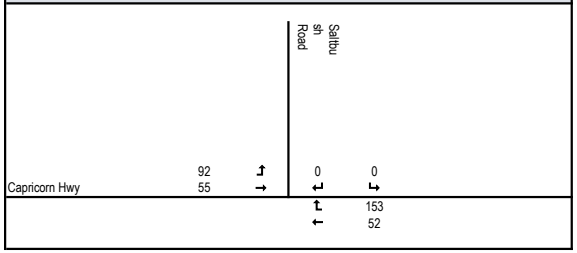


C. INTERSECTION TURN WARRANT ASSESSMENT

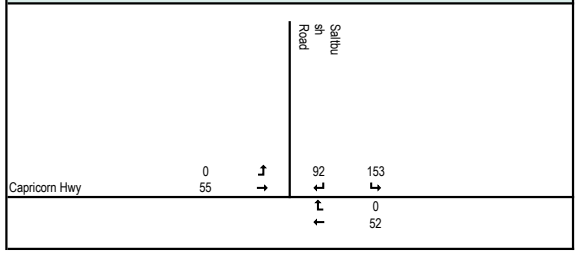
C

Appendix C - Intersection Turn Warrant Assessment

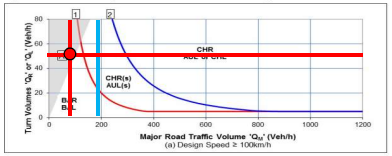
2022 AM



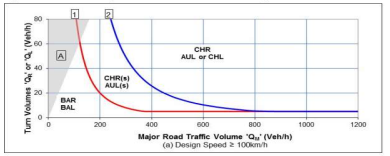
2022 PM



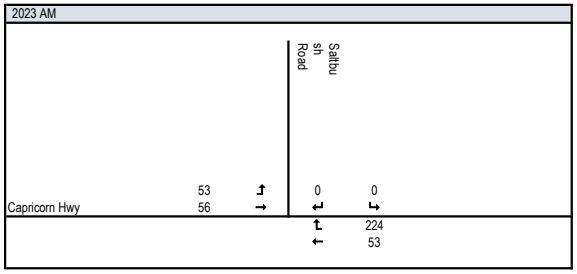
2022 AM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	92	153
Qm	55	199
Turn Treatment	BAL	CHR (s)



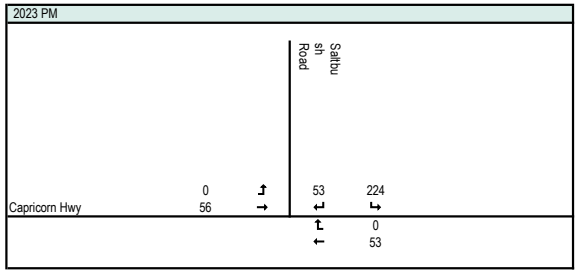
2022 PM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	0	0
Qm	55	107
Turn Treatment	NA	NA



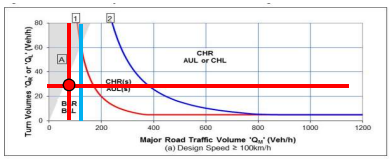
2023 AM



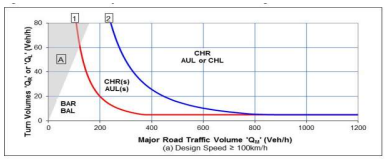
2023 PM



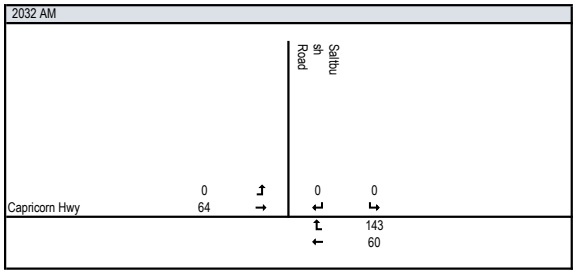
2023 AM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	53	224
Qm	56	161
Turn Treatment	BAL	CHR (s)



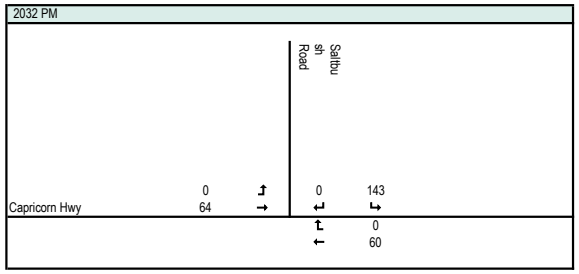
2023 PM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	0	0
Qm	56	108
Turn Treatment	NA	NA



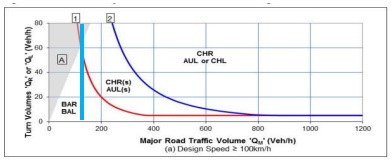
2032 AM



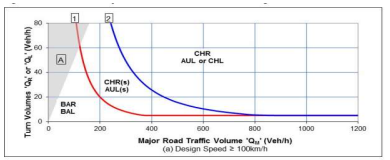
2032 PM



2032 AM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	0	143
Qm	64	124
Turn Treatment	NA	CHR (s)

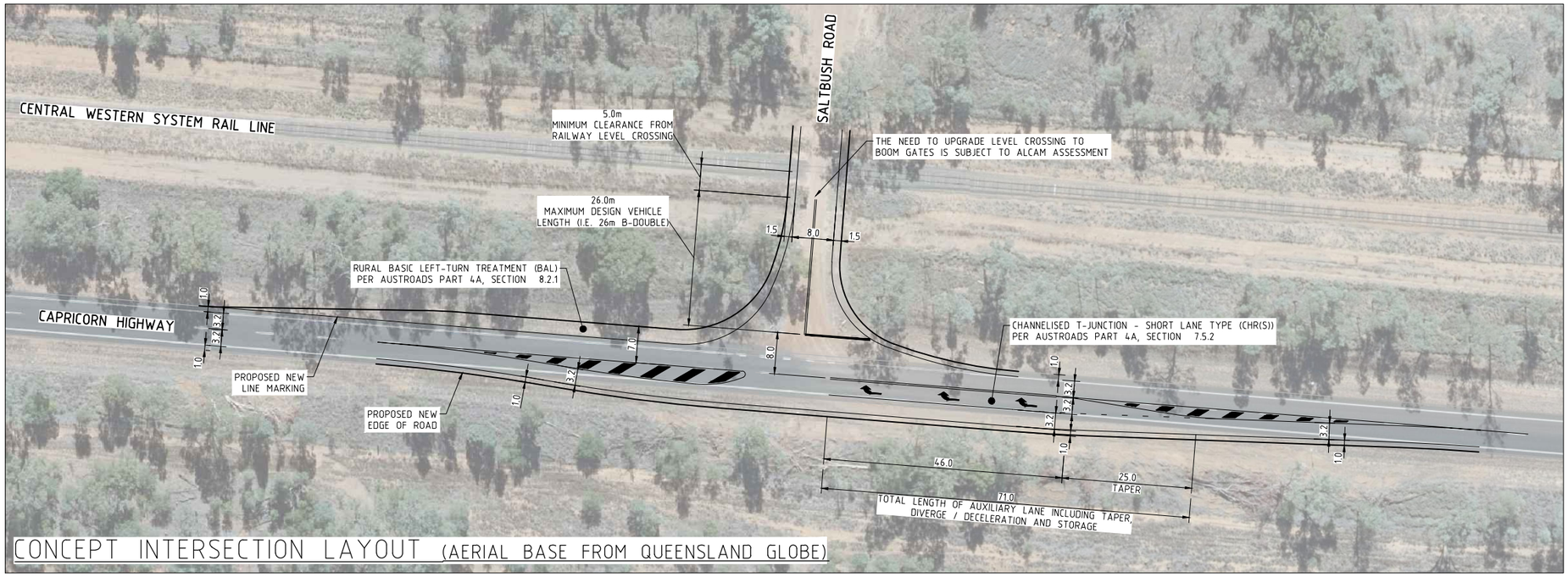


2032 PM	Left onto Saltbush Rd	Right onto Saltbush Rd
Ql/r	0	0
Qm	64	124
Turn Treatment	NA	NA



D. INTERSECTION CONCEPT DESIGN

D



CONCEPT INTERSECTION LAYOUT (AERIAL BASE FROM QUEENSLAND GLOBE)

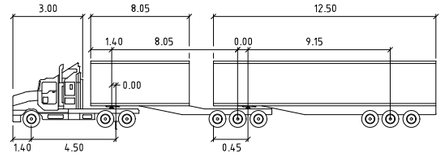
N

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 500mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 10km/h

DESIGN VEHICLE

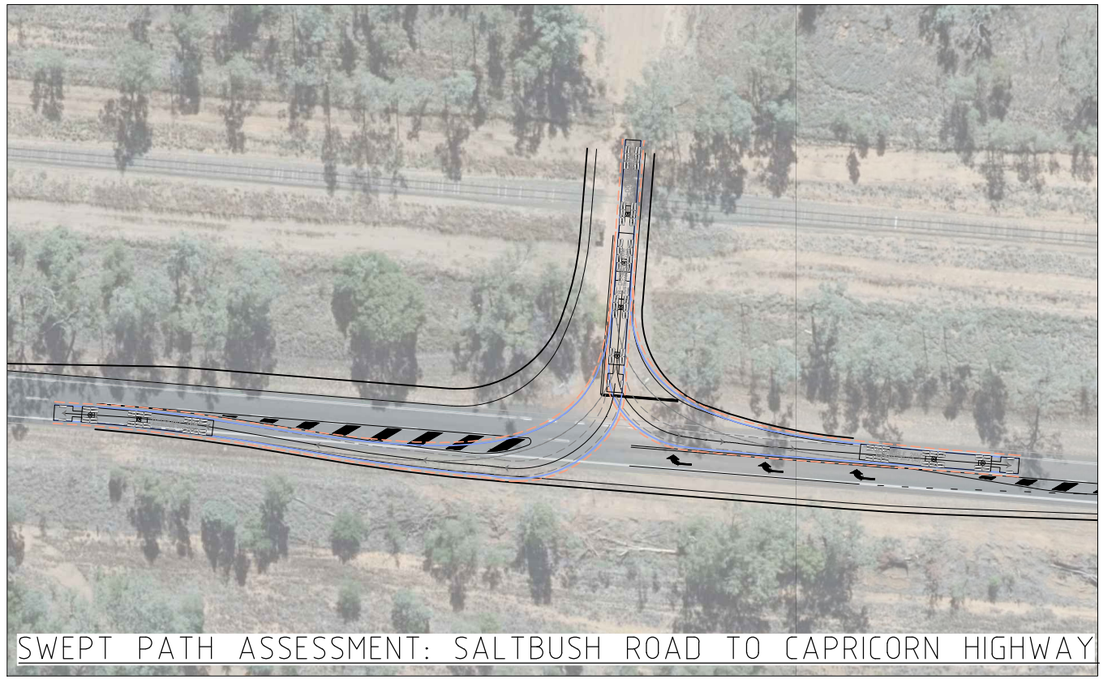


B-DOUBLE 26M

meters

Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 23.4
Tractor Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

SWEPT PATH ASSESSMENT: CAPRICORN HIGHWAY TO SALTBUSH ROAD



SWEPT PATH ASSESSMENT: SALTBUSH ROAD TO CAPRICORN HIGHWAY

GTA consultants
www.gta.com.au

Melbourne 03 9851 9600
Sydney 02 8448 1800
Brisbane 07 3113 5000
Adelaide 08 8334 3600
Perth 08 6169 1000

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED H.TRUONG
DESIGN CHECK A.SHETTY
APPROVED BY M.HULBERT
DATE ISSUED 06/12/18
CAD FILE NO. Q163320-01.DWG
SCALE A3 0 5 10 20 1:1000

GALILEE POWER STATION PROJECT
CAPRICORN HIGHWAY / SALTBUSH ROAD INTERSECTION
CONCEPT LAYOUT

DRAWING NO. Q163320-01 SHEET 1 OF 1 ISSUE P1

P:\Q16300-16399\Q163320 GALILEE POWER PROJECT\CAD\Q163320-01.DWG PLOTTED BY HENRY TRUONG ON 13/12/2018 AT 13:05

E. PAVEMENT IMPACT ASSESSMENT

SAR IMPACT - BASE

					SAR4																								
Road Name	ID	IRECTIO	TdistStart	TdistEnd	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GLADSTONE - MT LARCOM ROAD	181	G	0	1.409	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	0	1.409	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	1.409	2.277	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	1.409	2.277	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	2.277	3.2	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	2.277	3.2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.2	3.258	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.2	3.258	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	3.258	3.37	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.258	3.37	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.37	3.756	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.37	3.756	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.756	3.892	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.756	3.892	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	3.892	4.625	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.892	4.625	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	4.625	7.063	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	4.625	7.063	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	7.063	9.325	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	7.063	9.325	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	9.325	12.292	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	9.325	12.292	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	12.292	32.14	0%	0%	0%	8%	8%	8%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	12.292	32.14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	0	11.445	0%	0%	0%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	0	11.445	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	11.445	45.42	0%	0%	0%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	11.445	45.42	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	45.42	85.308	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	45.42	85.308	0%	0%	0%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	85.308	108.938	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	85.308	108.938	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	108.938	114.088	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	108.938	114.088	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.088	114.388	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.088	114.388	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.388	116.961	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.388	116.961	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	116.961	119.737	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	116.961	119.737	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	119.737	121.051	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	119.737	121.051	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0	0.738	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0	0.738	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0.738	5.495	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0.738	5.495	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.495	5.69	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.495	5.69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.69	5.97	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.69	5.97	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.97	9.39	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.97	9.39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	9.39	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	9.39	10	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	10	13.367	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	10	13.367	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	13.367	17.856	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	13.367	17.856	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	17.856	51.62	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	17.856	51.62	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	51.62	73.35	0%	0%	0%	6%	6%	5%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	51.62	73.35	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	73.35	106.38	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	73.35	106.38	0%	0%	0%	6%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	0	36.04	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	0	36.04	0%	0%	0%	7%	7%	6%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	36.04	82.671	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	36.04	82.671	0%	0%	0%	8%	7%	7%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	82.671	86.15	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	82.671	86.15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	86.15	90.56	0%	0%	0%	9%	9%	8%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	86.15	90.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	90.56	127.95	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	90.56	127.95	0%	0%	0%	9%	9%	8%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	127.95	157.46	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	127.95	157.46	0%	0%	0%	10%	10%	9%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%

CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.46	157.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.46	157.56	0%	0%	0%	10%	10%	9%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.56	157.78	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.56	157.78	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.78	158.64	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.78	158.64	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.64	158.95	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.64	158.95	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.95	159.55	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.95	159.55	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	0	1.08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	0	1.08	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	1.08	2.17	0%	0%	0%	8%	8%	8%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	1.08	2.17	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	2.17	43.3	0%	0%	0%	16%	16%	15%	12%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	9%	9%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	2.17	43.3	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	43.3	70.531	0%	0%	0%	26%	26%	25%	19%	19%	19%	19%	18%	18%	18%	18%	17%	17%	17%	17%	16%	16%	16%	16%	16%	15%	15%	15%	15%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	43.3	70.531	0%	0%	0%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	70.531	107.95	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	70.531	107.95	0%	0%	0%	25%	24%	24%	18%	18%	18%	17%	17%	17%	17%	16%	16%	16%	16%	15%	15%	15%	15%	15%	15%	14%	14%	14%	14%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	107.95	167.94	0%	0%	0%	23%	23%	23%	17%	17%	17%	16%	16%	16%	16%	16%	15%	15%	15%	15%	14%	14%	14%	14%	14%	14%	14%	14%	13%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	107.95	167.94	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	0	54.27	0%	0%	0%	7%	7%	7%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	0	54.27	0%	0%	0%	45%	44%	44%	25%	25%	24%	24%	24%	23%	23%	22%	22%	22%	21%	21%	21%	20%	20%	20%	20%	19%	19%	19%	19%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

SAR IMPACT - OPTION 1

Base year 2018

Days Per Year 350

					SAR4																								
Road Name	ID	IRECTIO	TdistStart	TdistEnd	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GLADSTONE - MT LARCOM ROAD	181	G	0	1.409	0%	0%	0%	5%	5%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%
GLADSTONE - MT LARCOM ROAD	181	A	0	1.409	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	1.409	2.277	0%	0%	0%	5%	5%	7%	7%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%
GLADSTONE - MT LARCOM ROAD	181	A	1.409	2.277	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	2.277	3.2	0%	0%	0%	5%	5%	7%	7%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%
GLADSTONE - MT LARCOM ROAD	181	A	2.277	3.2	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.2	3.258	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.2	3.258	0%	0%	0%	5%	5%	7%	7%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%
GLADSTONE - MT LARCOM ROAD	181	G	3.258	3.37	0%	0%	0%	5%	5%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
GLADSTONE - MT LARCOM ROAD	181	A	3.258	3.37	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.37	3.756	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.37	3.756	0%	0%	0%	5%	5%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
GLADSTONE - MT LARCOM ROAD	181	A	3.756	3.892	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.756	3.892	0%	0%	0%	5%	5%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
GLADSTONE - MT LARCOM ROAD	181	G	3.892	4.625	0%	0%	0%	5%	5%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
GLADSTONE - MT LARCOM ROAD	181	A	3.892	4.625	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	4.625	7.063	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	4.625	7.063	0%	0%	0%	6%	6%	8%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	7.063	9.325	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	7.063	9.325	0%	0%	0%	6%	6%	8%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	G	9.325	12.292	0%	0%	0%	6%	6%	8%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	9.325	12.292	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	12.292	32.14	0%	0%	0%	8%	8%	10%	10%	10%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%
GLADSTONE - MT LARCOM ROAD	181	A	12.292	32.14	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	0	11.445	0%	0%	0%	4%	4%	6%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	0	11.445	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	11.445	45.42	0%	0%	0%	4%	4%	6%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	11.445	45.42	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	45.42	85.308	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	45.42	85.308	0%	0%	0%	5%	4%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	85.308	108.938	0%	0%	0%	3%	3%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	85.308	108.938	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	108.938	114.088	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	108.938	114.088	0%	0%	0%	4%	4%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.088	114.388	0%	0%	0%	4%	4%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.088	114.388	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.388	116.961	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.388	116.961	0%	0%	0%	4%	4%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	116.961	119.737	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	116.961	119.737	0%	0%	0%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	119.737	121.051	0%	0%	0%	2%	2%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	119.737	121.051	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0	0.738	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0	0.738	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0.738	5.495	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0.738	5.495	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.495	5.69	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.495	5.69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.69	5.97	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.69	5.97	0%	0%	0%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.97	9.39	0%	0%	0%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.97	9.39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	9.39	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	9.39	10	0%	0%	0%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	10	13.367	0%	0%	0%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	10	13.367	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	13.367	17.856	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	13.367	17.856	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	17.856	51.62	0%	0%	0%	5%	5%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	17.856	51.62	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	51.62	73.35	0%	0%	0%	6%	6%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	51.62	73.35	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	73.35	106.38	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	73.35	106.38	0%	0%	0%	6%	5%	7%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	0	36.04	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	0	36.04	0%	0%	0%	7%	7%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	36.04	82.671	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	36.04	82.671	0%	0%	0%	8%	7%	9%	9%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	82.671	86.15	0%	0%	0%	5%	5%	7%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	82.671	86.15	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	86.15	90.56	0%	0%	0%	9%	9%	11%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	8%	7%	7%	7%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	86.15	90.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	90.56	127.95	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	90.56	127.95	0%	0%	0%	9%	9%	11%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	8%	7%	7%	7%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	127.95	157.46	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	127.95	157.46	0%	0%	0%	10%	10%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.46	157.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.46	157.56	0%	0%	0%	10%	10%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.56	157.78	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.56	157.78	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.78	158.64	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.78	158.64	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.64	158.95	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.64	158.95	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.95	159.55	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.95	159.55	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	0	1.08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	0	1.08	0%	0%	0%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	1.08	2.17	0%	0%	0%	8%	8%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	1.08	2.17	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	2.17	43.3	0%	0%	0%	16%	16%	20%	19%	18%	18%	18%	17%	17%	17%	16%	16%	16%	16%	15%	15%	15%	15%	14%	14%	14%	14%	14%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	2.17	43.3	0%	0%	0%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	43.3	70.531	0%	0%	0%	26%	26%	33%	31%	30%	30%	29%	29%	29%	28%	28%	27%	27%	27%	26%	26%	26%	25%	25%	25%	24%	24%	24%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	43.3	70.531	0%	0%	0%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	70.531	107.95	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	70.531	107.95	0%	0%	0%	25%	24%	30%	29%	28%	28%	27%	27%	27%	26%	26%	25%	25%	25%	24%	24%	24%	23%	23%	23%	23%	23%	22%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	107.95	167.94	0%	0%	0%	23%	23%	29%	27%	27%	26%	26%	26%	25%	25%	25%	24%	24%	23%	23%	23%	23%	22%	22%	22%	21%	21%	21%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	107.95	167.94	0%	0%	0%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	0	54.27	0%	0%	0%	7%	7%	8%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	0	54.27	0%	0%	0%	45%	44%	44%	30%	29%	29%	28%	28%	27%	27%	26%	26%	25%	25%	25%	24%	24%	24%	23%	23%	23%	22%	22%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

SAR IMPACT - OPTION 2

Base year 2018

Days Per Year 350

					SAR4																									
Road Name	ID	IRECTIO	TdistStart	TdistEnd	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GLADSTONE - MT LARCOM ROAD	181	G	0	1.409	0%	0%	0%	5%	5%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	A	0	1.409	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	1.409	2.277	0%	0%	0%	5%	5%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	A	1.409	2.277	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	G	2.277	3.2	0%	0%	0%	5%	5%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	A	2.277	3.2	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	A	3.2	3.258	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	G	3.2	3.258	0%	0%	0%	5%	5%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	G	3.258	3.37	0%	0%	0%	5%	5%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	3.258	3.37	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.37	3.756	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.37	3.756	0%	0%	0%	5%	5%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	3.756	3.892	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.756	3.892	0%	0%	0%	5%	5%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	G	3.892	4.625	0%	0%	0%	5%	5%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	3.892	4.625	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	4.625	7.063	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	G	4.625	7.063	0%	0%	0%	6%	6%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	A	7.063	9.325	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	G	7.063	9.325	0%	0%	0%	6%	6%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	G	9.325	12.292	0%	0%	0%	6%	6%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%
GLADSTONE - MT LARCOM ROAD	181	A	9.325	12.292	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GLADSTONE - MT LARCOM ROAD	181	G	12.292	32.14	0%	0%	0%	8%	8%	12%	12%	12%	12%	11%	11%	11%	11%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%
GLADSTONE - MT LARCOM ROAD	181	A	12.292	32.14	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	0	11.445	0%	0%	0%	4%	4%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	0	11.445	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	11.445	45.42	0%	0%	0%	4%	4%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	11.445	45.42	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	45.42	85.308	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	45.42	85.308	0%	0%	0%	5%	4%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	85.308	108.938	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	85.308	108.938	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	108.938	114.088	0%	0%	0%	0%	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	108.938	114.088	0%	0%	0%	4%	4%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.088	114.388	0%	0%	0%	4%	4%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.088	114.388	0%	0%	0%	0%	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.388	116.961	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.388	116.961	0%	0%	0%	4%	4%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	116.961	119.737	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	116.961	119.737	0%	0%	0%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	119.737	121.051	0%	0%	0%	2%	2%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	119.737	121.051	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0	0.738	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0	0.738	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0.738	5.495	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0.738	5.495	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.495	5.69	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.495	5.69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.69	5.97	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.69	5.97	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.97	9.39	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.97	9.39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	9.39	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	9.39	10	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	10	13.367	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	10	13.367	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	13.367	17.856	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	13.367	17.856	0%	0%	0%	4%	4%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	17.856	51.62	0%	0%	0%	5%	5%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	17.856	51.62	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	51.62	73.35	0%	0%	0%	6%	6%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	51.62	73.35	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	73.35	106.38	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	73.35	106.38	0%	0%	0%	6%	5%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	0	36.04	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	0	36.04	0%	0%	0%	7%	7%	10%	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	36.04	82.671	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	36.04	82.671	0%	0%	0%	8%	7%	11%	11%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	8%	8%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	82.671	86.15	0%	0%	0%	5%	5%	8%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	82.671	86.15	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	86.15	90.56	0%	0%	0%	9%	9%	13%	12%	12%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	86.15	90.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	90.56	127.95	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	90.56	127.95	0%	0%	0%	9%	9%	13%	12%	12%	12%	12%	11%	11%	11%	11%	10%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	127.95	157.46	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	127.95	157.46	0%	0%	0%	10%	10%	14%	14%	14%	13%	13%	13%	13%	12%	12%	12%	12%	11%	11%	11%	11%	11%	11%	10%	10%	10%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.46	157.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.46	157.56	0%	0%	0%	10%	10%	14%	14%	14%	13%	13%	13%	13%	12%	12%	12%	12%	11%	11%	11%	11%	11%	11%	10%	10%	10%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.56	157.78	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.56	157.78	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.78	158.64	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.78	158.64	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.64	158.95	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.64	158.95	0%	0%	0%	3%	3%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.95	159.55	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.95	159.55	0%	0%	0%	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	0	1.08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	0	1.08	0%	0%	0%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	1.08	2.17	0%	0%	0%	8%	8%	12%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	9%	8%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	1.08	2.17	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	2.17	43.3	0%	0%	0%	16%	16%	23%	23%	22%	22%	21%	21%	21%	20%	20%	20%	19%	19%	19%	18%	18%	18%	18%	17%	17%	17%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	2.17	43.3	0%	0%	0%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	43.3	70.531	0%	0%	0%	26%	26%	38%	38%	37%	36%	36%	35%	35%	34%	34%	33%	33%	33%	32%	32%	31%	31%	31%	30%	30%	29%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	43.3	70.531	0%	0%	0%	2%	1%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	70.531	107.95	0%	0%	0%	3%	3%	4%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	70.531	107.95	0%	0%	0%	25%	24%	36%	35%	34%	34%	33%	33%	32%	32%	31%	31%	31%	30%	30%	29%	29%	29%	28%	28%	27%	27%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	107.95	167.94	0%	0%	0%	23%	23%	34%	33%	33%	32%	32%	31%	31%	30%	30%	29%	29%	29%	28%	28%	27%	27%	27%	26%	26%	26%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	107.95	167.94	0%	0%	0%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	0	54.27	0%	0%	0%	7%	7%	9%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	0	54.27	0%	0%	0%	45%	44%	44%	30%	29%	29%	28%	28%	27%	27%	26%	26%	25%	25%	25%	24%	24%	24%	23%	23%	23%	22%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

SAR IMPACT - OPTION 3

Base year 2018

Days Per Year 350

					SAR4																								
Road Name	ID	IRECTIO	TdistStart	TdistEnd	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GLADSTONE - MT LARCOM ROAD	181	G	0	1.409	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	0	1.409	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	1.409	2.277	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	1.409	2.277	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	2.277	3.2	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	2.277	3.2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.2	3.258	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.2	3.258	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	3.258	3.37	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.258	3.37	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	3.37	3.756	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.37	3.756	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.756	3.892	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	3.756	3.892	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	3.892	4.625	0%	0%	0%	5%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	3.892	4.625	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	A	4.625	7.063	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	4.625	7.063	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	7.063	9.325	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	7.063	9.325	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	G	9.325	12.292	0%	0%	0%	6%	6%	6%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
GLADSTONE - MT LARCOM ROAD	181	A	9.325	12.292	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GLADSTONE - MT LARCOM ROAD	181	G	12.292	32.14	0%	0%	0%	8%	8%	8%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
GLADSTONE - MT LARCOM ROAD	181	A	12.292	32.14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	0	11.445	0%	0%	0%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	0	11.445	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	11.445	45.42	0%	0%	0%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	11.445	45.42	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	45.42	85.308	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	45.42	85.308	0%	0%	0%	5%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	85.308	108.938	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	85.308	108.938	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	108.938	114.088	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	108.938	114.088	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.088	114.388	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.088	114.388	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	114.388	116.961	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	114.388	116.961	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	116.961	119.737	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	116.961	119.737	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	G	119.737	121.051	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%
BRUCE HIGHWAY (BENARABY - ROCKHAMPTON)	10E	A	119.737	121.051	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0	0.738	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0	0.738	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	0.738	5.495	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	0.738	5.495	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.495	5.69	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.495	5.69	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.69	5.97	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.69	5.97	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	5.97	9.39	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	5.97	9.39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	9.39	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	9.39	10	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	10	13.367	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	10	13.367	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	13.367	17.856	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	13.367	17.856	0%	0%	0%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	17.856	51.62	0%	0%	0%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	17.856	51.62	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	51.62	73.35	0%	0%	0%	6%	6%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	51.62	73.35	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	A	73.35	106.38	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ROCKHAMPTON - DUARINGA)	16A	G	73.35	106.38	0%	0%	0%	6%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	0	36.04	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	0	36.04	0%	0%	0%	7%	7%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	36.04	82.671	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	36.04	82.671	0%	0%	0%	8%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	82.671	86.15	0%	0%	0%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	82.671	86.15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	86.15	90.56	0%	0%	0%	9%	9%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	86.15	90.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	90.56	127.95	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	90.56	127.95	0%	0%	0%	9%	9%	8%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	127.95	157.46	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	127.95	157.46	0%	0%	0%	10%	10%	9%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.46	157.56	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.46	157.56	0%	0%	0%	10%	10%	9%	8%	8%	8%	8%	8%	8%	8%	7%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.56	157.78	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.56	157.78	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	157.78	158.64	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	157.78	158.64	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.64	158.95	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.64	158.95	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	A	158.95	159.55	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (DUARINGA - EMERALD)	16B	G	158.95	159.55	0%	0%	0%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	0	1.08	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	0	1.08	0%	0%	0%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	1.08	2.17	0%	0%	0%	8%	8%	8%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	1.08	2.17	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	2.17	43.3	0%	0%	0%	16%	16%	15%	14%	13%	13%	13%	13%	13%	12%	12%	12%	12%	12%	11%	11%	11%	11%	11%	10%	10%	10%	10%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	2.17	43.3	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	43.3	70.531	0%	0%	0%	26%	26%	25%	23%	22%	22%	22%	21%	21%	21%	21%	20%	20%	20%	19%	19%	19%	19%	18%	18%	18%	18%	18%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	43.3	70.531	0%	0%	0%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	70.531	107.95	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	70.531	107.95	0%	0%	0%	25%	24%	24%	21%	21%	21%	20%	20%	20%	19%	19%	19%	19%	18%	18%	18%	18%	17%	17%	17%	17%	16%	16%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	G	107.95	167.94	0%	0%	0%	23%	23%	23%	20%	20%	20%	19%	19%	19%	18%	18%	18%	18%	17%	17%	17%	17%	16%	16%	16%	16%	16%	16%
CAPRICORN HIGHWAY (EMERALD - ALPHA)	16C	A	107.95	167.94	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	0	54.27	0%	0%	0%	7%	7%	24%	24%	24%	23%	23%	23%	22%	22%	22%	21%	21%	21%	21%	20%	20%	20%	20%	19%	19%	19%	
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	0	54.27	0%	0%	0%	45%	44%	44%	30%	29%	29%	28%	28%	27%	27%	26%	26%	25%	25%	25%	24%	24%	24%	23%	23%	23%	22%	
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	54.27	80.65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	80.65	139.7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	G	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CAPRICORN HIGHWAY (ALPHA - BARCALDINE)	16D	A	139.7	140.49	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

F. PAVEMENT IMPACT ASSESSMENT CONTRIBUTIONS

F

Scenario 1: No FGD

	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	Year11	Year12	Year13	Year14	Year15	Year16	Year17	Year18	Year19	Year20	Year21	Year22	Year23	Year24	Year25	Total
181	$ 9,426	$ 9,426	$ 15,508	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 58,754
10E	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16A	$ 7,902	$ 7,902	$ 10,379	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,182
16B	$ 14,631	$ 14,631	$ 31,304	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 2,985	$ 2,985	$ 2,985	$ 2,985	$ 2,985	$ 2,985	$ -	$ -	$ -	$ 187,711
16C	$ 48,674	$ 48,674	$ 104,206	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ 47,329	$ -	$ -	$ -	$ 1,101,712
16D	$ 14,742	$ 14,742	$ 26,241	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ 4,521	$ -	$ -	$ -	$ 141,620
Total	$ 95,376	$ 95,376	$ 187,637	$ 64,709	$ 64,709	$ 64,709	$ 64,709	$ 64,709	$ 60,664	$ 60,664	$ 60,664	$ 60,664	$ 60,664	$ 60,573	$ 60,573	$ 60,573	$ 54,835	$ 54,835	$ 54,835	$ 54,835	$ 54,835	$ 54,835	$ -	$ -	$ -	$ 1,515,979

Scenario 2: FGD Option 1

	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	Year11	Year12	Year13	Year14	Year15	Year16	Year17	Year18	Year19	Year20	Year21	Year22	Year23	Year24	Year25	Total
181	$ 9,426	$ 9,426	$ 24,919	$ 13,519	$ 13,519	$ 13,519	$ 13,519	$ 13,519	$ 13,519	$ 13,519	$ 13,042	$ 13,042	$ 13,042	$ 13,042	$ 13,042	$ 10,327	$ 8,564	$ 8,564	$ 8,564	$ 8,564	$ 8,564	$ 8,564	$ -	$ -	$ -	$ 265,328
10E	$ -	$ -	$ 16,277	$ 9,189	$ 9,189	$ 9,189	$ 3,828	$ 3,828	$ 3,828	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 55,328
16A	$ 7,902	$ 7,902	$ 22,568	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 11,956	$ 7,335	$ 7,335	$ 7,335	$ 3,076	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 171,055
16B	$ 14,631	$ 14,631	$ 39,152	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 22,082	$ 21,543	$ 21,543	$ 21,543	$ 21,543	$ 21,543	$ 21,543	$ 21,543	$ 21,543	$ -	$ -	$ -	$ 483,662
16C	$ 48,674	$ 48,674	$ 130,432	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ 73,645	$ -	$ -	$ -	$ 1,627,036
16D	$ 14,742	$ 14,742	$ 29,030	$ 11,831	$ 11,831	$ 11,831	$ 11,831	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ 5,916	$ -	$ -	$ -	$ 194,574
Total	$ 95,376	$ 95,376	$ 262,378	$ 142,222	$ 142,222	$ 142,222	$ 136,862	$ 130,946	$ 130,946	$ 127,118	$ 126,641	$ 126,641	$ 122,020	$ 122,020	$ 121,481	$ 114,506	$ 109,668	$ 109,668	$ 109,668	$ 109,668	$ 109,668	$ 109,668	$ -	$ -	$ -	$ 2,796,983

Scenario 3: FGD Option 2

	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	Year11	Year12	Year13	Year14	Year15	Year16	Year17	Year18	Year19	Year20	Year21	Year22	Year23	Year24	Year25	Total
181	$ 9,426	$ 9,426	$ 28,280	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,880	$ 16,284	$ -	$ -	$ -	$ 367,254
10E	$ -	$ -	$ 29,351	$ 17,893	$ 17,893	$ 17,893	$ 17,893	$ 17,893	$ 17,893	$ 17,033	$ 11,641	$ 11,641	$ 11,641	$ 11,641	$ 11,641	$ 11,641	$ 6,780	$ 4,850	$ 4,850	$ 4,850	$ -	$ -	$ -	$ -	$ -	$ 244,919
16A	$ 7,902	$ 7,902	$ 31,857	$ 19,678	$ 19,678	$ 16,146	$ 16,146	$ 16,146	$ 16,146	$ 16,146	$ 16,146	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ 15,149	$ -	$ -	$ -	$ 350,532
16B	$ 14,631	$ 14,631	$ 45,038	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ 27,968	$ -	$ -	$ -	$ 605,701
16C	$ 48,674	$ 48,674	$ 150,631	$ 93,643	$ 93,643	$ 93,643	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ 93,314	$ -	$ -	$ -	$ 2,021,935
16D	$ 14,742	$ 14,742	$ 31,122	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 13,924	$ 6,962	$ 6,962	$ 6,962	$ -	$ -	$ -	$ 304,269
Total	$ 95,376	$ 95,376	$ 316,279	$ 189,986	$ 189,986	$ 186,454	$ 186,125	$ 186,125	$ 186,125	$ 185,265	$ 179,873	$ 178,876	$ 178,876	$ 178,876	$ 178,876	$ 178,876	$ 174,014	$ 172,085	$ 172,085	$ 165,123	$ 160,273	$ 159,678	$ -	$ -	$ -	$ 3,894,609

Scenario 4: FGD Option 3

	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	Year11	Year12	Year13	Year14	Year15	Year16	Year17	Year18	Year19	Year20	Year21	Year22	Year23	Year24	Year25	Total
181	$ 9,426	$ 9,426	$ 15,508	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ 1,876	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 58,754
10E	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16A	$ 7,902	$ 7,902	$ 10,379	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 26,182
16B	$ 14,631	$ 14,631	$ 31,304	$ 13,886	$ 13,886	$ 13,886	$ 13,886	$ 13,886	$ 13,886	$ 13,886	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 10,892	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ 6,847	$ -	$ -	$ -	$ 268,249
16C	$ 48,674	$ 48,674	$ 104,206	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ 47,420	$ -	$ -	$ -	$ 1,102,529
16D	$ 14,742	$ 14,742	$ 30,774	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ 13,575	$ -	$ -	$ -	$ 318,180
Total	$ 95,376	$ 95,376	$ 192,171	$ 76,757	$ 76,757	$ 76,757	$ 76,757	$ 76,757	$ 76,757	$ 76,757	$ 73,763	$ 73,763	$ 73,763	$ 73,763	$ 73,763	$ 73,763	$ 71,886	$ 67,841	$ 67,841	$ 67,841	$ 67,841	$ 67,841	$ -	$ -	$ -	$ 1,773,893

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