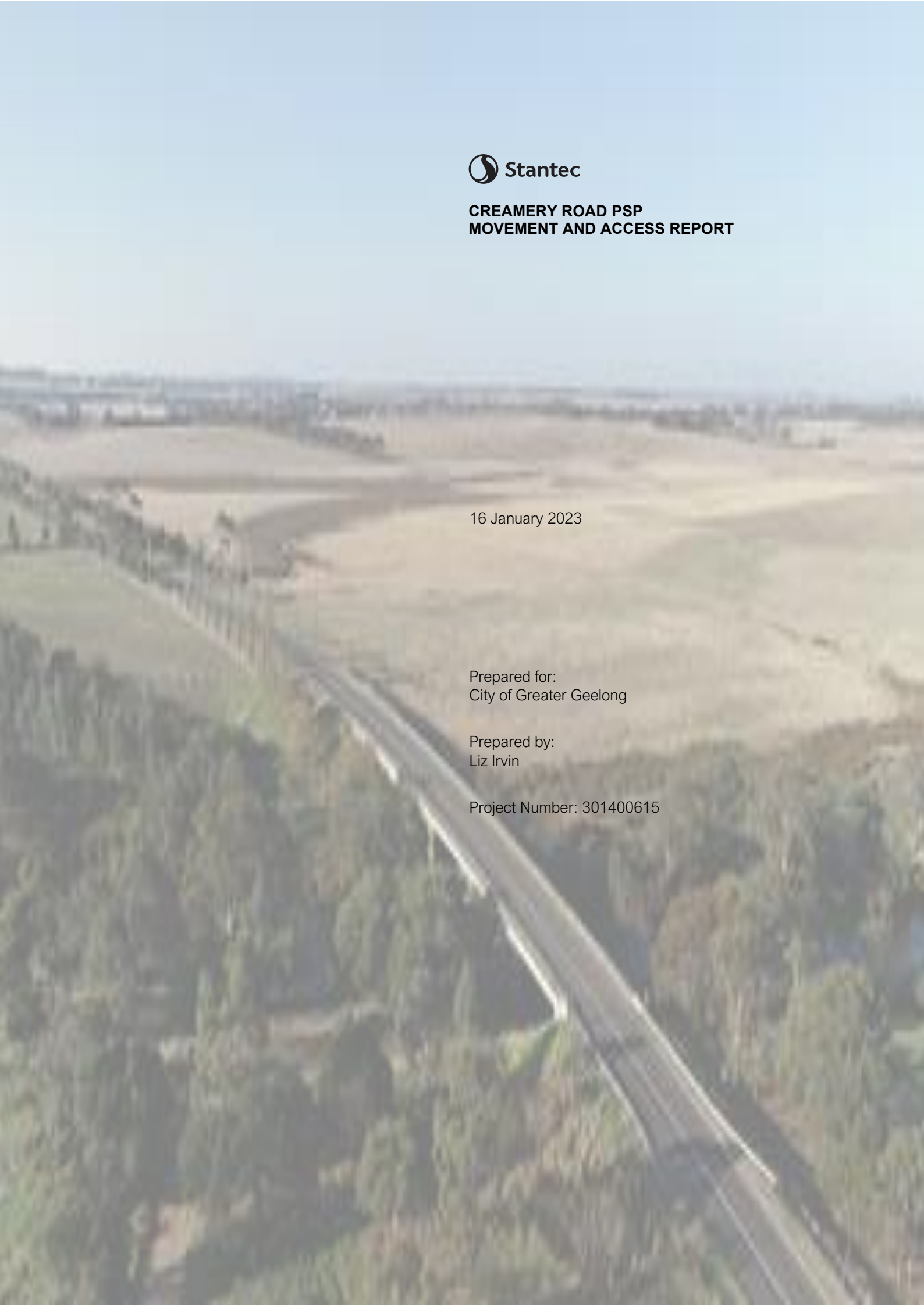

Stantec

CREAMERY ROAD PSP
MOVEMENT AND ACCESS REPORT

16 January 2023

Prepared for:
City of Greater Geelong

Prepared by:
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Project Number: 301400615

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1 Introduction

1.1 Background

The Creamery Road Precinct Structure Plan (PSP) is located in Geelong's Western Growth Area (WGA). The PSP is bordered by Midland Highway to the South, Geelong Ring Road to the east, Ballarat Railway Line to the north and Geelong – Ballan Road to the west. The PSP will be the first in the WGGA and will have approximately 3,000 dwellings, associated local activity centre and education uses.

When complete, the precinct will feature:

- The Clever and Creative Corridor
- A neighbourhood activity centre located on the Clever and Creative Corridor
- Cowies Creek corridor open space network that includes a shared path and connection to the existing Ted Wilson trail via a new connection under the rail bridge at Bluestone Bridge Road
- Myers Reserve
- The constructed waterway network.

The PSP is currently being prepared by the City of Greater Geelong (the City) in consultation with authorities, landowners and major stakeholders.

1.2 Report Purpose

Stantec has been engaged by the City to prepare a Transport Movement and Access Assessment and transport modelling for the Creamery Road Precinct Structure Plan. This report presents the outcome of the transport modelling and an assessment of how these results will impact on the internal and external road network and cross-sections.

1.3 References

In preparing this report, reference has been made to the following:

- City of Greater Geelong Planning Scheme
- The Northern and Western Geelong Growth Areas (NWGGA) Movement and Access Study, prepared by GTA (now Stantec) in 2019
- The Northern and Western Geelong Growth Areas (NWGGA) Framework Plan
- other documents as nominated.

2 Existing Transport Context

2.1 Location

The Creamery Road PSP is located approximately 8km to the northwest of the Geelong CBD and 10km southwest of Lara. Land use zoning within the PSP is a mix of Farm Zone (FZ), Urban Growth Zone (UGZ) and Rural Living Zone (RLZ). As stated earlier, the PSP is bordered by Midland Highway to the South, Geelong Ring Road to the east, Ballarat Railway Line to the north and Geelong – Ballan Road to the west.

The site is currently predominantly rural area living (farmland) with some sporting facilities located within the boundary to the site's east.

2.2 Existing transport network

The road network within and surrounding the Creamery Road PSP varies between primary arterial roads and unsealed 'dry weather only' local roads. Key roads include:

- Midland Highway – a primary arterial road with one lane in each direction. The Midland Highway is the main road connecting the regional cities of Geelong with Ballarat.
- Geelong-Ballan Road – a secondary arterial with one lane in each direction providing a connection between the Midland Highway and Ballan.
- Evans Road– a local road with one lane in each direction generally aligned in the north – south direction. It current provides access to a number of low density and rural properties.
- Creamery Road – a local road with one lane in each direction. The road includes a bridge overpass of the Geelong Ring Road and provides access between the urban areas of Geelong and sporting fields and a school located within the PSP.

The Midland Highway, Geelong-Ballan Road and Creamery Road are the key roads that service the PSP. The Midland Highway provides interchange access to the Geelong Ring Road which separates the PSP from the established areas of Geelong.

Counts in 2019 indicated that the Midland Highway carries in the order of 12,500 vehicles per day (two way) and that the Geelong – Ballan Road carries in the order of 2,500 vehicles per day.

A summary of the existing transport context for all modes is provided in Table 1.

Table 2.1: Existing Transport Context for Creamery Road PSP

Mode	Commentary
	• Midland Highway (1-lane in each direction) forms the key arterial road link between Geelong and Ballarat (and Bannockburn) and is assumed to carry in the order of 15,000vpd. • Geelong-Ballan Road (1-lane in each direction) forms an arterial road link between Geelong and Ballan (via Anakie) and is assumed to carry in the order of 3,000vpd. • Creamery Road (1-lane in each direction) forms a grade separated crossing of the Geelong Ring Road.
	• Midland Highway and Geelong-Ballan Road are both B-Double approved routes and form part of the Principal Freight Network (PFN).
	• The #19 (Geelong - Bannockburn) bus service operates along Midland Highway adjacent to the PSP. The service currently operates with a single afternoon service in each direction. • The Geelong – Ballarat Railway Line is located on the northern boundary of the PSP. The line does not currently cater for passenger services.
	• A shared path is provided on the north side of Midland Highway connecting Geelong Ballan Road and the Geelong Ring Road shared path. • No other formal cycling facilities are provided in the future PSP Area.
	• Pedestrian footpaths are provided as part of the Creamery Road link connecting Covenant College to Bell Post Hill (suburb). • No other formal footpath facilities are provided in the PSP Area.

3 The PSP

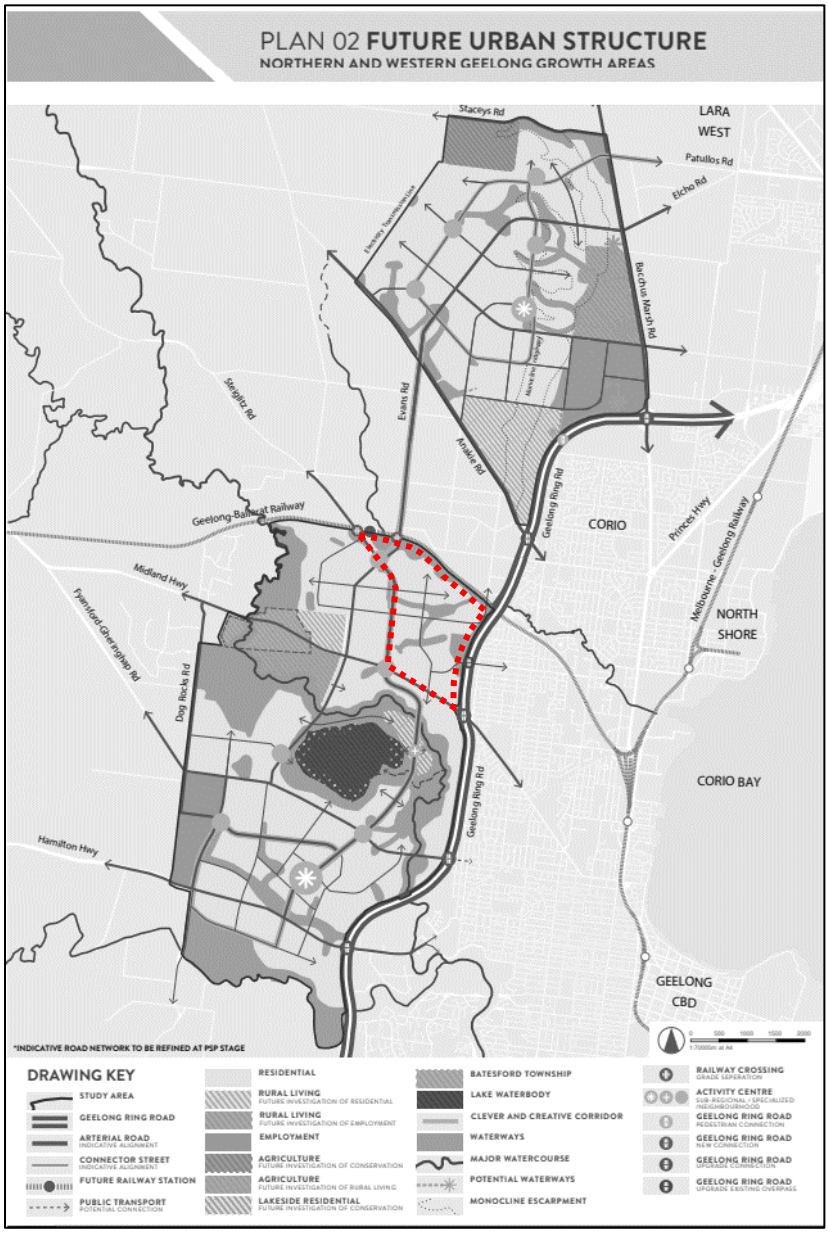
3.1 Growth Area Framework Plan

The Northern and Western Geelong Growth Areas Framework Plan was prepared in 2019 and provides guidance on the delivery of the transport and land use elements for the two growth areas, which will deliver an additional 110,000 residents to Geelong.

The Framework Plan was adopted into the Greater Geelong planning scheme through Amendment C395 which was approved and gazetted in May 2021. Nine precinct structure plans (PSPs) will be prepared for the delivery of the two Growth Areas with each PSP providing guidance to the delivery of urban development of Geelong's new neighbourhoods. Creamery Road is the first precinct that will be delivered.

Figure 1 shows the location of the Creamery Road PSP in the context of the Northern and Western Geelong Growth Area (NWGGA) Future Urban Structure.

Figure 3.1: Western Geelong Growth Area (left) with the Creamery Road PSP area (right)



The Framework Plan also identifies nine PSP's to be delivered as part of the orderly delivery of the growth areas. The features of the Creamery Road PSP that are identified in the Framework Plan is presented in Figure 3.2.

Figure 3.2 : Creamery Road Precinct within the Framework Plan

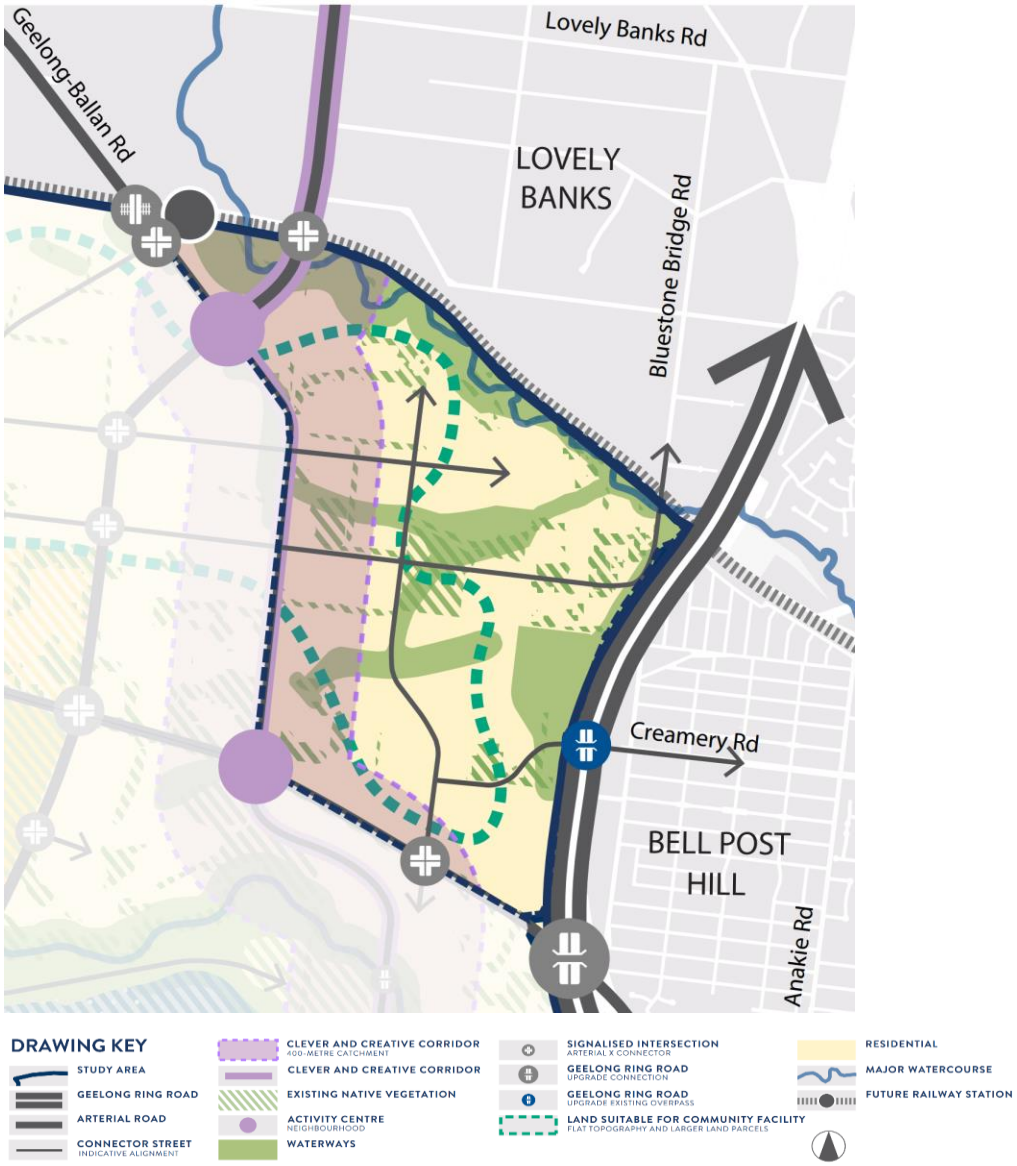


Figure 2, which represents the PSP in the context of the Framework Plan, identifies a number of transport features in and through the PSP including the Clever and Creative Corridor which is proposed to travel along the PSP's western boundary. A revised Future Urban Structure has been prepared and is discussed in more detail in Section 3.2.

The Clever and Creative Corridor is intended to be a boulevard that prioritises public transport, walking and cycling modes and connects key land uses together, such as activity centres, schools and open space. The Clever and Creative Corridor has been identified as a means to meet the objectives of the 20 minute neighbourhood; which is identified in Plan Melbourne as "giving people the ability to meet most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home".

The Clever and Creative Corridor forms a loop in both growth areas and also connected to Evans Road, through the northern part of the PSP. Evans Road is currently a rural road that will ultimately be upgraded to an arterial road that will connect to the Northern Growth Area. Additionally, it provides a connection to a potential future railway station located at the northern end of the PSP on the disused Geelong to Ballarat passenger rail line, noting that it still functions as a freight line. From a "movement and place"

perspective the Clever and Creative Corridor will have a greater place function (whilst maintaining a movement function for pedestrians, cyclists and buses) compared to a traditional connector or arterial road.

It is important to note that the Framework Plan is intended as a guiding document for the preparation of the PSP and is subject to change through the design and development process.

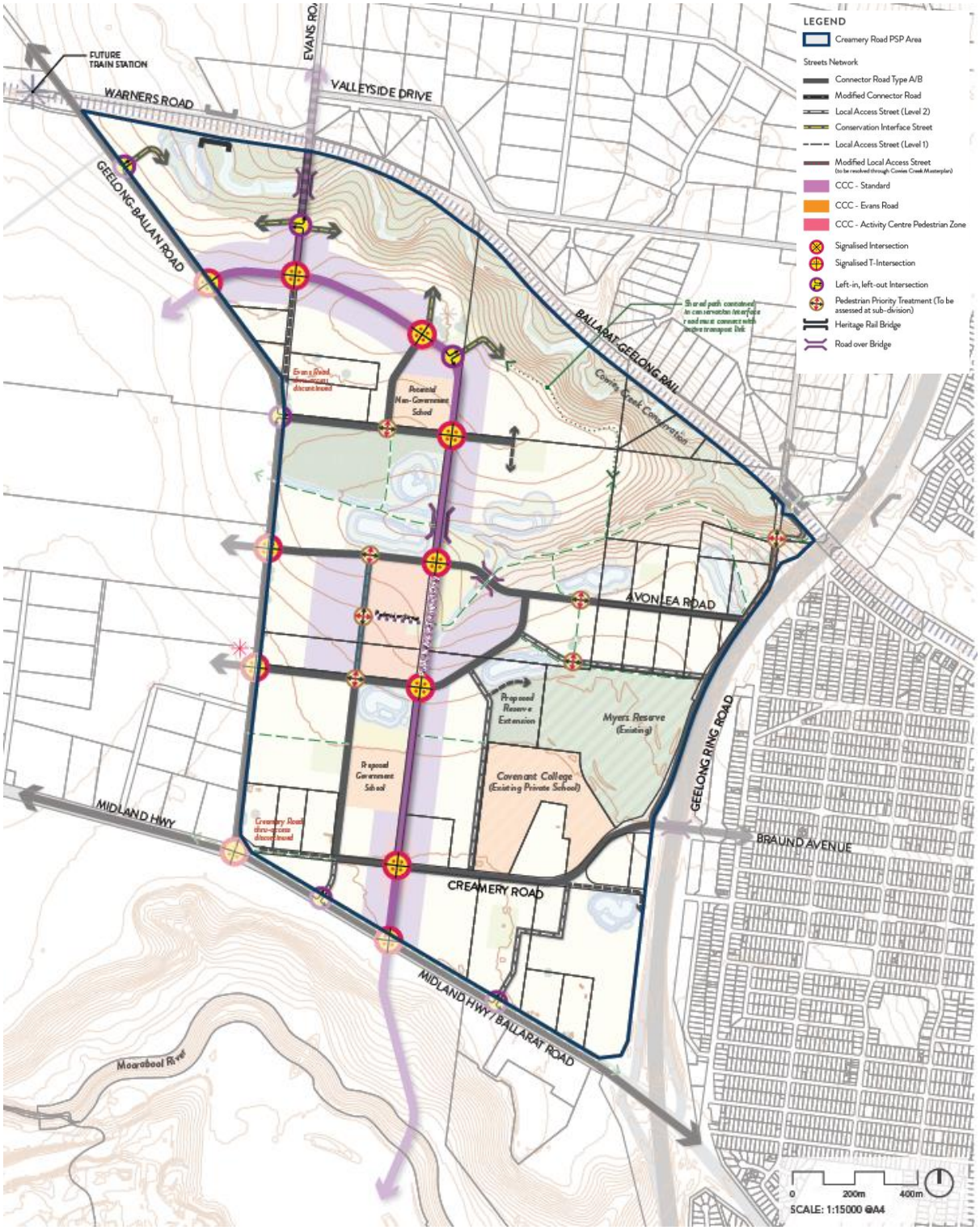
There are also a number of items that are identified in the Framework Plan that will be delivered by the State including:

- A potential new railway station that is subject to commuter rail services recommencing. The location of the potential station is located outside of the PSP
- Upgrade and duplication of the Midland Highway west of the Geelong Ring Road
- Upgrade of the Midland Highway interchange on the Geelong Ring Road
- Rail overpass of Geelong-Ballarat railway line on the Clever and Creative Corridor at Evans Road
- The grade separation of the Geelong – Ballan Road at Cowies Creek corridor, subject to commuter rail services

3.2 Proposed Urban Structure

The proposed Urban Structure for the Creamery Road PSP has been prepared by the City of Greater Geelong and is shown in Figure 3.3.

Figure 3.3: Creamery Road PSP Future Urban Structure (Draft)



The FUS generally aligns with the Framework Plan, noting the following key characteristics from a transport perspective:

- The Clever and Creative Corridor has shifted its alignment from the Geelong – Ballan Road in travels internal to the PSP. The relocation of the CCC to an internal alignment has been necessitated by a power line overlay limiting the type and intensity of land use that would be able to be delivered adjacent to the Geelong-Ballan Road corridor. By relocating the Clever and Creative corridor to within the Creamery Road PSP, the vision of the corridor and the Framework plan is maintained.
- A dedicated pedestrian, cycle and bus link is provided through the middle of the site along the alignment of the Clever and Creative Corridor.
- Creamery Road will be provided as a Connector Road and will provide access across the Geelong Ring Road. The road will be bus capable and have cycle lanes to ensure connectivity to Bell Post Hill and Geelong.
- One signalised access point is proposed along the Midland Highway frontage of the site, which is located approximately 700m east of the Geelong – Ballan Road. This intersection will connect to the Batesford South PSP where the CCC will continue.
- A further four signalised intersections are proposed along the Geelong – Ballan Road, including the intersection with the realigned Clever and Creative Corridor. These intersections will provide strong linkages to the Batesford North PSP to the west. These are all located at spacings of greater than 400m.
- A series of left in / left out connections along the Clever and Creative Corridor are provided to ensure that it maintains its priority for public transport and modes other than car.
- A connector road network is proposed throughout the PSP, providing vehicle and pedestrian access to the various land use parcels.

4 Transport Modelling

4.1 Overview

Strategic transport modelling uses future population, employment and land use data projections to model the change in demands and impacts on the road and public transport networks. The Victorian Integrated Transport Model (VITM) is developed by the Department of Transport (DoT) to assist in the planning of road and public transport infrastructure and contains all public transport corridors, major freeways, main arterials and connector roads within Victoria.

The key inputs in undertaking strategic transport modelling to inform precinct planning activities are the following:

- Population, employment and land use projections
- Proposed road and public transport networks with the following characteristics:
    - Roadway capacity
    - Number of lanes
    - Signposted speeds
    - Public transport routes
    - Public transport service capacity, frequency and speed

4.1.1 LIMITATION OF STRATEGIC TRANSPORT MODELLING

It is important to note the limitations that a strategic transport model has. Principally, it is a tool used to evaluate the performance of a transport network based on the travel decisions that people make on a day to day basis. Travel demand is generated in a strategic model based on demographic information including the households, education, retail and employment-based trips.

They are not generally used to predict exact volumes on roads (or patronage on public transport) rather they are used to analyse the travel demand for a specific scenario (and to compare against). They can be used for corridor studies, wide area impact studies, major road projects, major public transport projects, different land use change scenarios, travel demand change / mode shift assessments and policy settings (i.e. public transport fares, parking charges, toll charges etc.).

This project used the model to determine the impacts of the introduction of the Creamery Road PSP in the context of the Western and Northern Geelong Growth Areas.

4.1.2 GEELONG GROWTH AREA TRANSPORT INFRASTRUCTURE STRATEGY (GGATIS) MODEL

The GGATIS model was prepared by Stantec for the City of Greater Geelong, the Department of Transport and the Victorian Planning Authority. The GGATIS will provide a strategy for the delivery of transport infrastructure that will support Geelong's growth over the next 30 years.

The preparation of GGATIS was underpinned by the State-wide Victorian Integrated Transport Model (S-VITM). The work builds upon the modelling work developed for the North and Western Geelong Growth Areas and was recalibrated and validated to ensure that the model is suitable for use. The process of model calibration includes adjusting model parameters so that as to a reasonable extent, the model is able to replicate observed data for a base year.

The modelling was documented in the Geelong Growth Areas Transport Infrastructure Strategy, S-VITM Transport Model Calibration and Validation Report, dated 8th May 2020 (V175460).

The GGATIS project is in draft format and is awaiting final endorsement by DoT (as of December 2022).

4.1.3 DO DIFFERENT SCENARIO

The modelling of the Creamery Road PSP has utilised the model prepared for the GGATIS. The GGATIS model tested a combination of land uses, transport infrastructure items and design years.
A summary of the model scenarios and years assessed is presented in Table 4.1.

Table 4.1: GGATIS Model Scenarios

Design Year	Reference Case	Base Case	Business As Usual	Do More	Do Different
2041 (Interim)	✓	✓	-	-	-
2051 (Ultimate)	✓	✓	✓	✓	✓

In order to underpin the assessment of the CRPSP, the "do different" modelling scenario has been adopted. In comparison to the other scenarios the "do different" scenario assumes a change in direction for the way in which people travel in Geelong. Specifically, investment is focused on measures that will create mode shift away from private vehicle to other modes, including public transport, walking and cycling.

4.2 Model Inputs

4.2.1 LAND USE INPUTS

The population, households, employment and enrolments for the Creamery Road PSP are outlined in Table 2. Also provided in Table 2 are the land use inputs used for the 2019 work completed to support the Framework Plan.

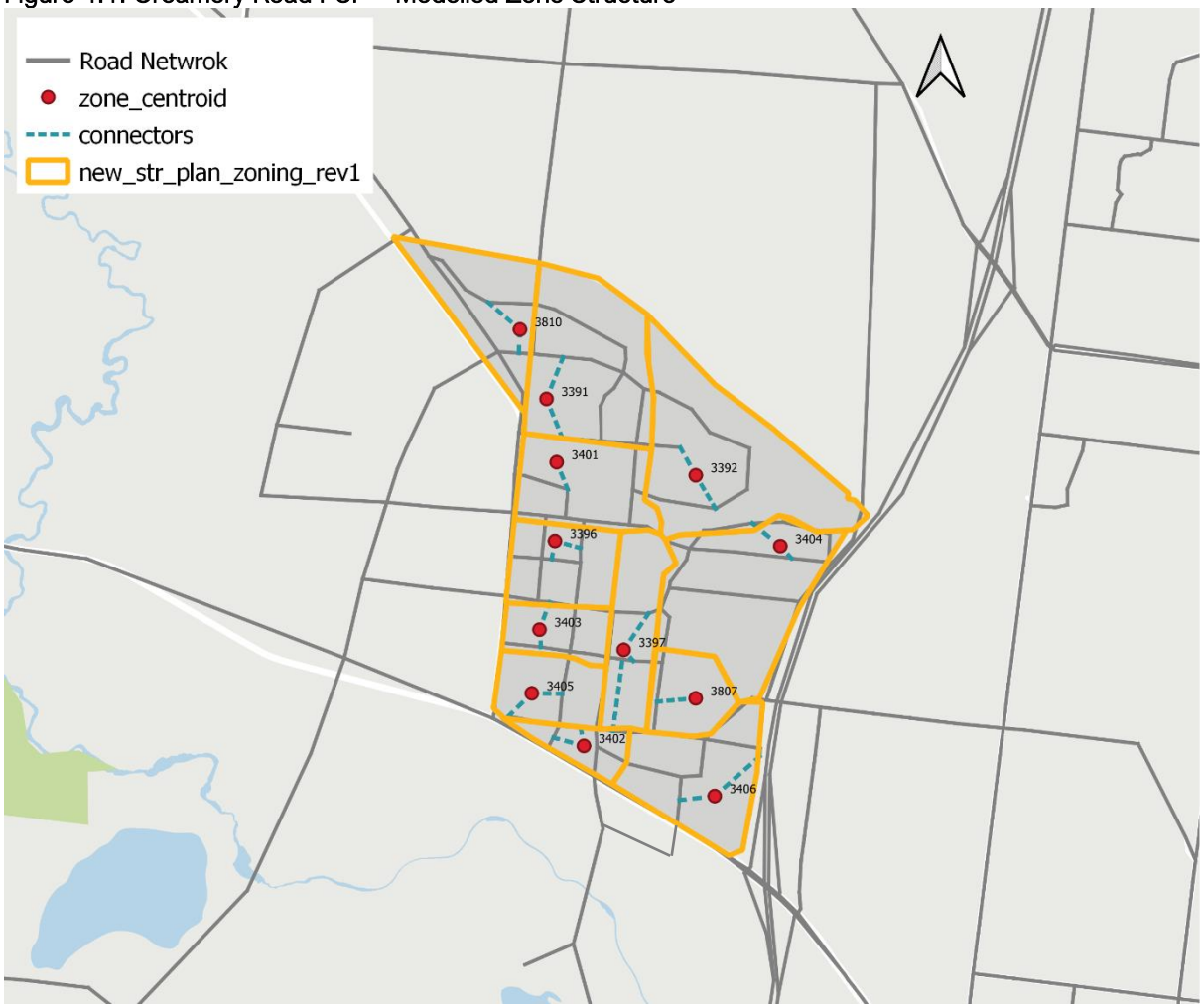
Table 4.2: Creamery Road PSP Land Use Inputs

Model	Population (People)	Household (Dwellings)	Employment (jobs)	Enrolment (no. of Students)
This Assessment	8,434	3,012	1,055	2,142
2019 Framework Plan	10,547	3,774	1,055	2,142
Difference	*-2,113*	*-762*	*0*	*0*

As shown in Table 2, the revised PSP will deliver in the order of 2,110 people less than the 2019 assessment completed in the Movement and Access Study. The number of jobs and students has remained the same.

Traffic zones, which are where traffic is loaded onto the network in the model, have been adjusted to reflect the FUS and is shown in Figure 4.

Figure 4.1: Creamery Road PSP – Modelled Zone Structure



The overall land use estimates for the Northern and Western Growth Areas and remainder of Geelong are the same as those documented in the 2019 Movement and Access Report.

4.2.2 TRANSPORT NETWORKS

The transport networks coded into the model are presented in Figure 5 through Figure 8, which are generally consistent with the FUS.

Figure 4.2: Creamery Road PSP – Modelled Number of Lanes (each direction)

Figure 4.3: Creamery Road PSP - Modelled Speed

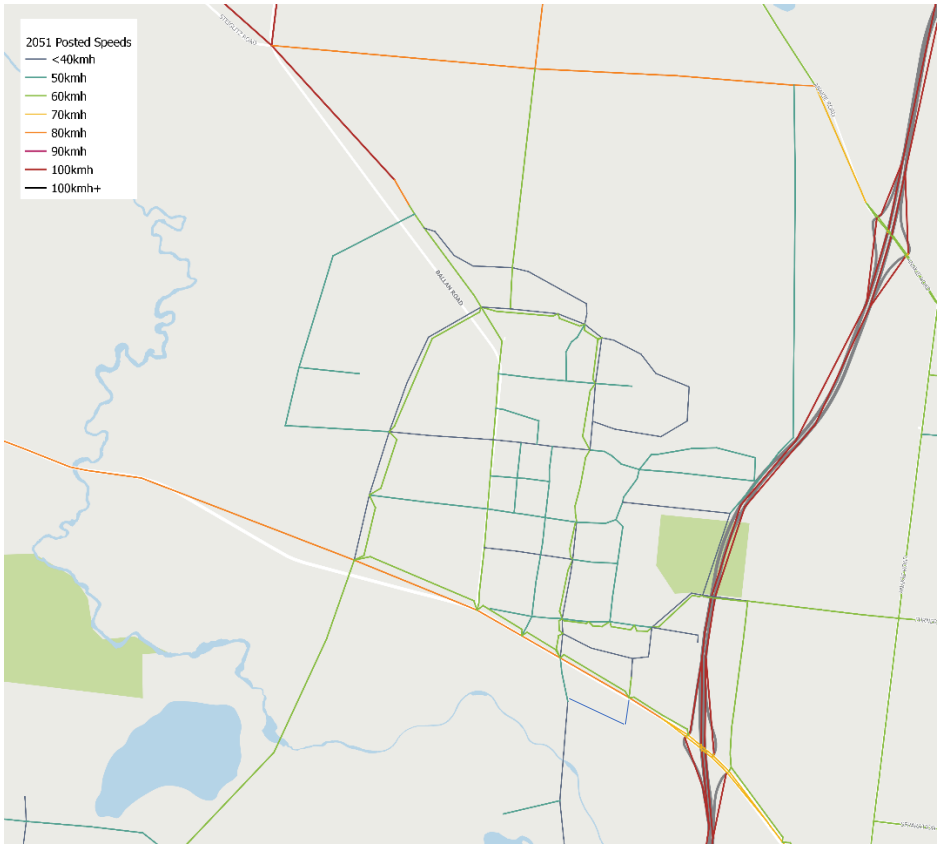


Figure 4.4: Creamery Road PSP – Modelled Road hierarchy

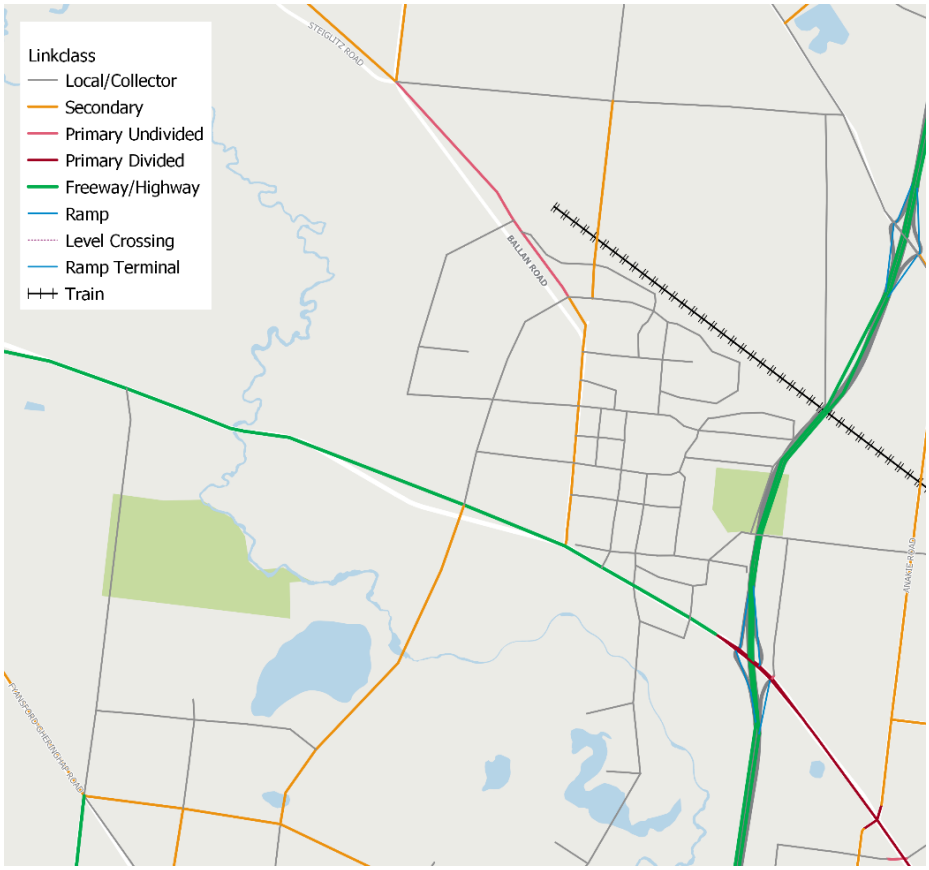


Figure 4.5: Creamery Road PSP – Modelled Clever and Creative Bus Network

The network is underpinned by the following features:

- The Midland Highway as an arterial road with two lanes in each direction plus a dedicated bus lane.
- The Geelong-Ballan Road will also be an arterial road with two lanes in each direction. This will also form the principal freight route for DoT
- Lynburn Road through the Batesford South PSP will be one lane in each direction however south of the Midland Highway will be a north south arterial through the Batesford Soiuth PSP with two lanes in each direction
- All other roads have been modelled as one lane in each direction
- The public transport network is provided through the PSP with the Clever and Creative Corridor being modelled as a dedicated PT corridor to on road traffic. The CCC is proposed to continue through the Batesford North PSP.
- All roads within the PSP are modelled with speed limits of 50km/hr except for the Clever and Creative Corridor which is being modelled as 40km/hr
- The Midland Highway has been modelled as 80 km/hr whilst all other roads are assumed as 60 km/hr, including the Geelong – Ballan Road, and
- Turn Bans are provided on the Midland Highway and Geelong Road in accordance with the intersection control (i.e. left in/left out) in the FUS, and on the Clever and Creative Corridor.

It is also noted that the network includes an additional connection from Batesford South to the Midland Highway located between the Geelong Ring Road and the CCC. This intersection will not connect into the CRPSP from Batesford North and is intended to be a vehicle access for that PSP.

4.3 Model Results

The Daily, AM and PM peak period volume plots are provided in Figure 9 through Figure 11. These have been prepared for 2051 which represents full development of the Growth Areas.

Figure 4.6: Daily Volume Plot (2051)

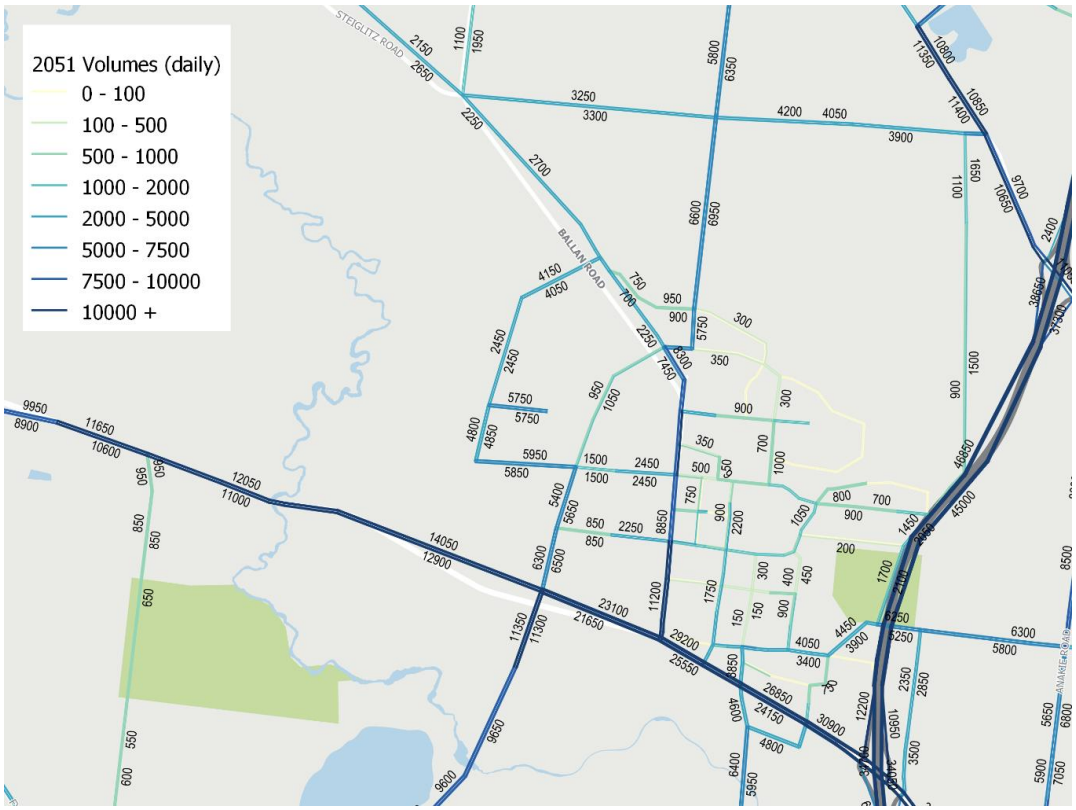


Figure 4.7: AM Peak Period Volume Plot (2051)

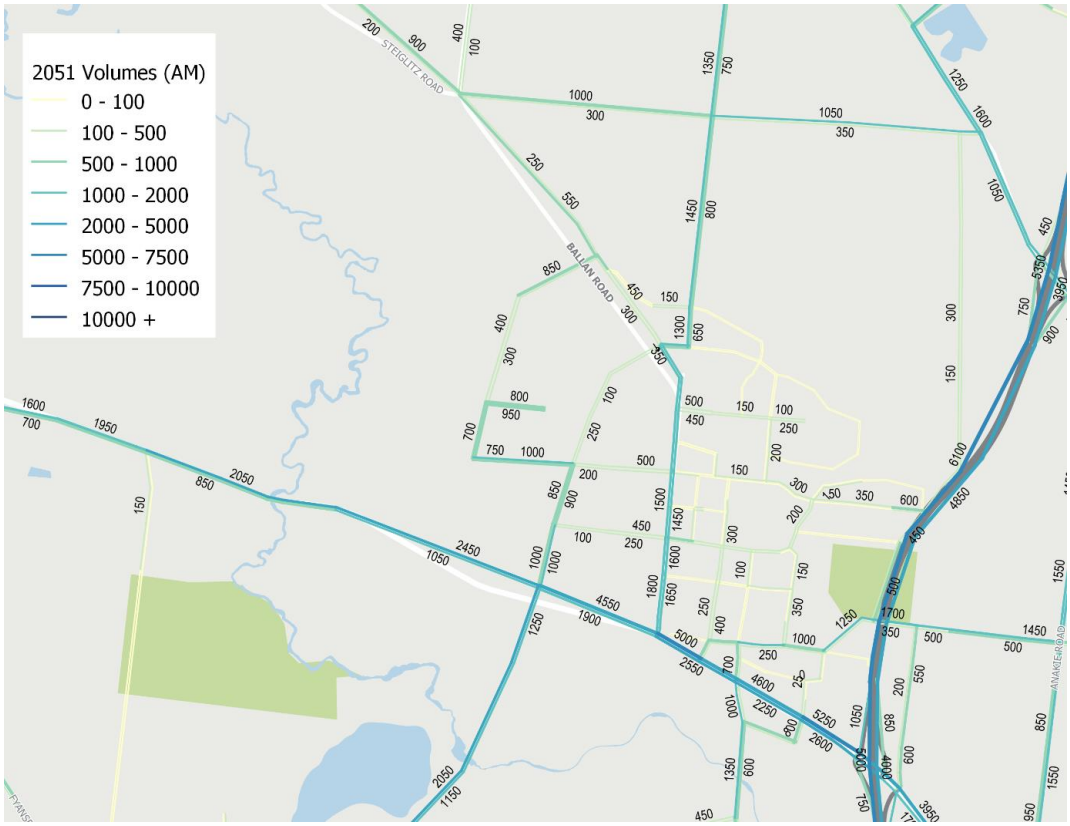


Figure 4.8: PM Peak Period Volume Plot (2051)

Some of the key observations of the modelling results are:

- The road network within the PSP is anticipated to carry volumes of less than 3,000 vehicles per day on most roads, with the highest traffic volumes expected on Creamery Road near the Geelong Ring Road which are in the order of 4,450 vehicles per day.
- Geelong – Ballan Road will be an attractive north south corridor for traffic from the Creamery. Road and Batesford North PSP's with two-way volumes of between 15,750 vehicles per day at the northern end and 22,550 at the southern end near the Midland Highway.
- The Clever and Creative Corridor is expected to carry low volumes, with around 500 vehicles per day in the middles of the PSP and 7,000 vehicles per day in the vicinity of the Midland Highway. The low volumes are a result of the low speeds and turn bans allowing for public transport to be provided in dedicated road space.
- The Midland Highway will carry more than 59,000 vehicles per day west of the Geelong Ring Road and more than 45,000 vehicles per day east of Geelong – Ballan Road
- Evans Road is expected to carry more than 13,000 vehicles per day north of the PSP.

In addition to the volume plots, the volume to capacity plots have been prepared for the AM and PM peak periods, as shown in Figure 12 and Figure 13. The volume to capacity ratio (degree of saturation) is a good indicator as to the operation of the network at specific link locations.

It is noted that the volume to capacity plots are based on two-hour traffic volume forecasts and are bi-directional. The current Geelong morning and evening peak periods typically last for about 30 minutes. The increased demands will result in "peak spreading" where the future peak period will last longer than the current 30 minutes. Accordingly, the changes to the VCR plots are not as pronounced as could be otherwise expected (i.e. if the VCR was based on a continued 30 minute peak hour).

In reality, the resultant outcome of the increase in demand would be the need for residents to alter their travel behaviour by either travelling at lower speeds or at different times during the peak period.

Figure 4.9: AM Peak Period Volume to Capacity Ratio (2051)

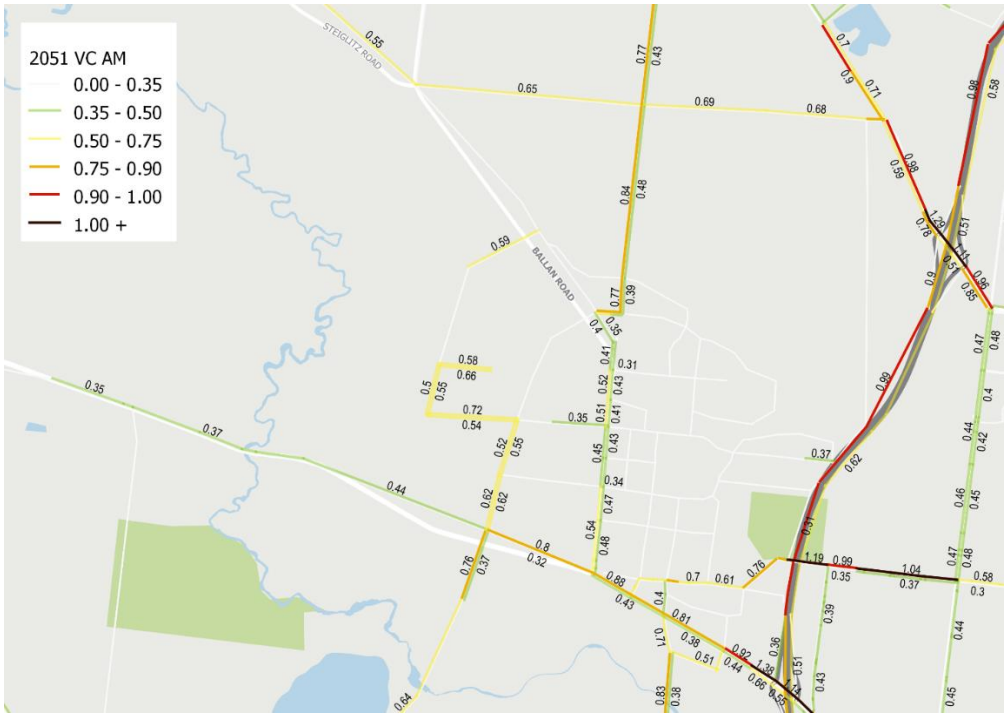
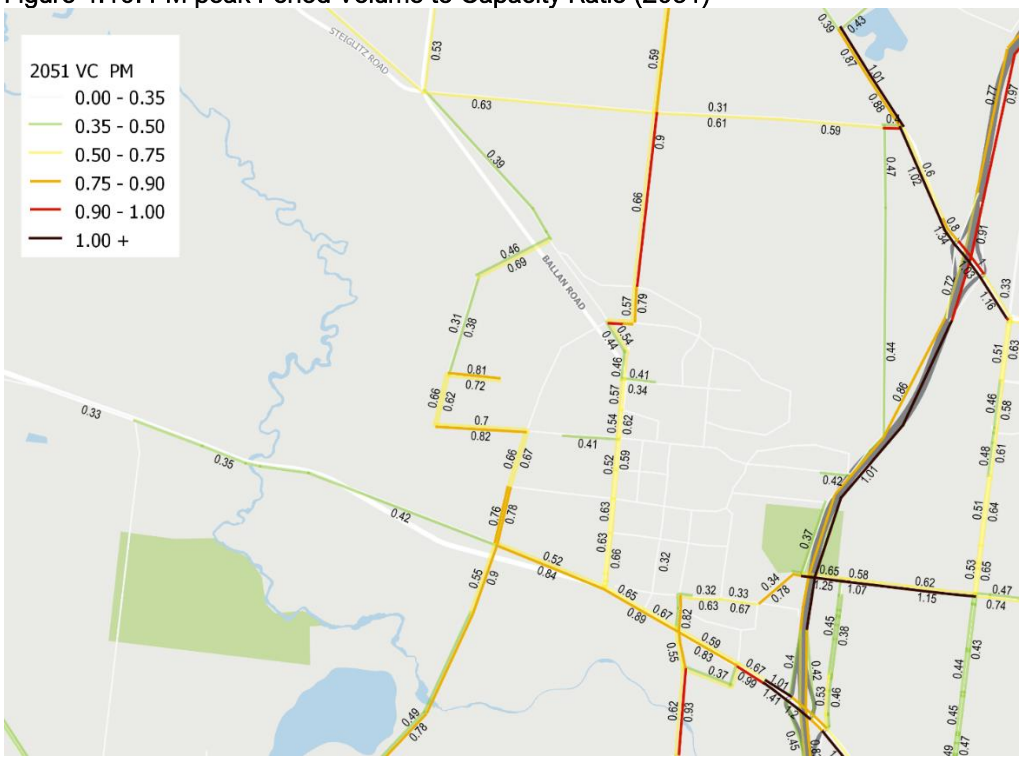


Figure 4.10: PM peak Period Volume to Capacity Ratio (2051)



The volume to capacity plots show the performance of the road network on respective links, with those having a ratio of greater than 0.9 (in red) approaching their theoretical capacities. Links that exceed their theoretical capacities are shown in black. The links that exceed 0.9 will result in a higher level of delay, with lower speeds and congestion, meaning that there will be a higher chance for peak spreading and changes to mode.

Other key observations of the results include:

- The Midland Highway will exceed its capacity east of the Geelong Road Road with volume to capacity ratio's of greater than 1.0 and close to 1.4.
- The Creamery Road bridge across the Geelong Ring Road is expected to also exceed its capacity with a volume to capacity ratio of greater than 1.25.
- Anakie Road, will also exceed its theoretical capacity with volume to capacity ratio's of greater than 1.0 also expected during the PM peak.

The majority of traffic from the PSP and surrounding area are seeking to access or cross the Geelong Ring Road and with the Midland Highway and Anakie Road reaching their capacity, traffic is attracted to Creamery Road.

Importantly, the assessment that has been undertaken is a link based and mid block assessment, it does not account for intersection capacities and performance – these will be determined through the delivery stage.

4.4 Midblock Capacity Assessment

The midblock capacity assessment assesses the forecast future traffic demands against the indicative two-way volume capacity of a road. The capacity of each road varies depending on a number of factors, such as number of traffic lanes, carriageway width, property access, on-street car parking, land use frontages, etc. The future indicative capacities of each of the roads have been sourced from Austroads which assumes a daily one lane capacity of 18,000 vehicles per day and the target speeds set out in the Cross Section descriptions.

An assessment of the midblock capacity of the key roads within and surrounding the PSP area shown in Figure 14 has been undertaken with a summary of the results provided in Table 4.3.

Figure 4.11: Key Locations for Midblock Assessment

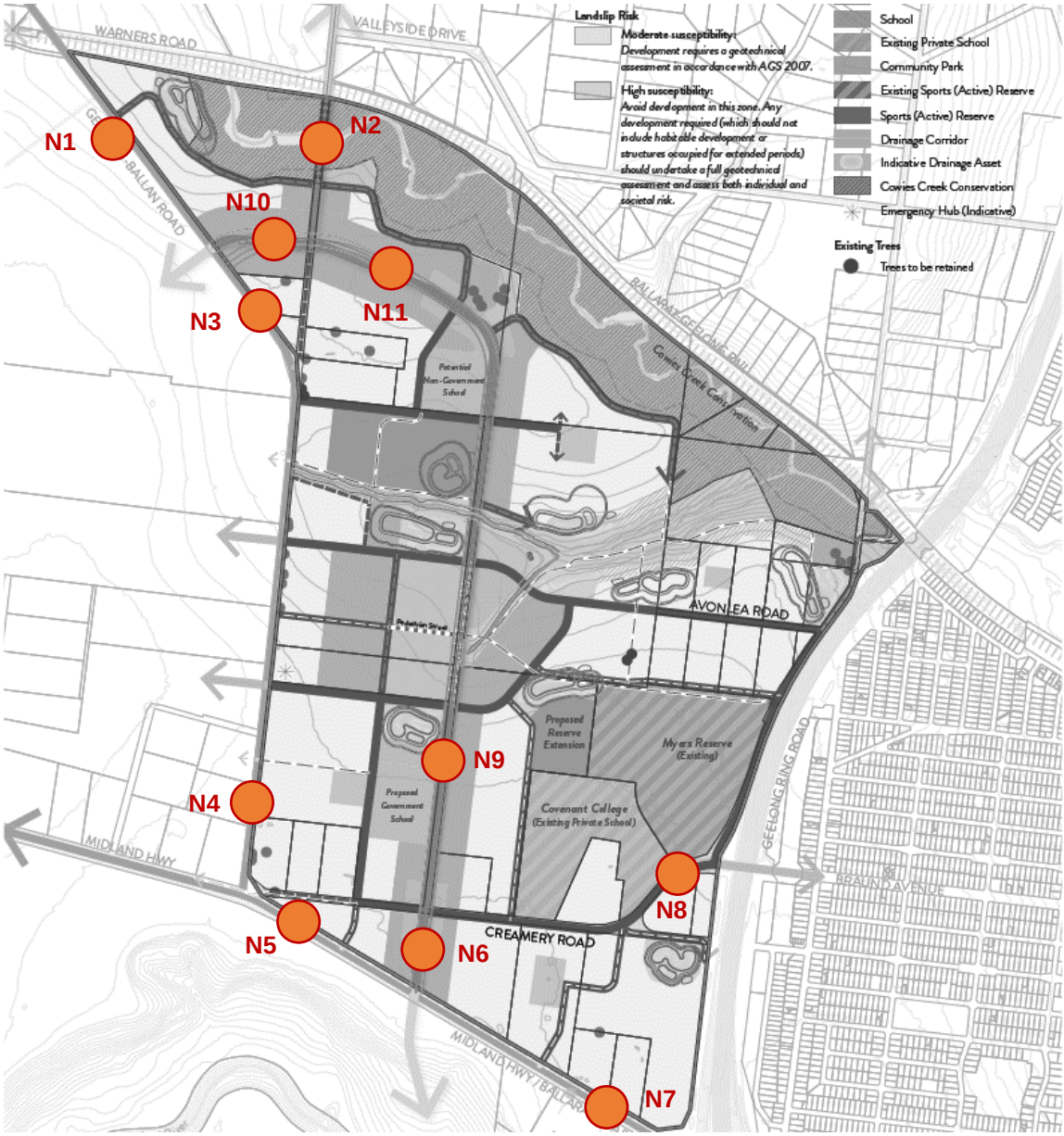


Table 4.3: Summary of Ultimate Daily Volumes on Key Roads (2051)

No.	Road Name	Expected Daily Traffic Volume	Proposed Classification and No. lanes	Notional Target Volumes
N1	Geelong – Ballan Road (north of Evans Road)	4,500 vpd	Arterial (4 lanes)	36,000 to 40,000vpd
N2	Evans Road (at railway crossing)	13,450 vpd	Clever & Creative Corridor (2 lanes)	15,000 to 20,000vpd
N3	Geelong – Ballan Road (south of Evans Road)	15,750 vpd	Arterial (4 lanes)	36,000 to 40,000vpd
N4	Geelong – Ballan Road (North of Midland Highway)	22,500 vpd	Arterial (4 lanes)	36,000 to 40,000vpd
N5	Midland Highway (east of Geelong – Ballan Road)	50,910 vpd	Arterial (4 lanes)	36,000 to 40,000vpd
N6	C & C Corridor (north of Midland Highway)	7,700 vpd	Clever & Creative Corridor (2 lanes)	up to 15,000vpd
N7	Midland Highway (west of Geelong Ring Road)	61,800 vpd	Arterial (4 lanes)	36,000 to 40,000vpd
N8	Creamery Road at Geelong Ring Road	11,500 vpd	Connector (2 lanes)	3,000 to 10,000vpd
N9	C & C Corridor (Internal)	600 vpd	Clever & Creative Corridor (2 lanes)	> 15,000vpd
N10	C & C Corridor (Internal)	16,180 vpd	Clever & Creative Corridor (2 lanes)	> 15,000vpd
N11	C & C Corridor (Internal)	700 vpd	Clever & Creative Corridor (2 lanes)	> 15,000vpd

Table 3 indicates that each of the key roads within and surrounding the PSP Area is anticipated to operate within their target or theoretical daily volume capacities, except for the Midland Highway.

It is clear that the Midland Highway will require an upgrade along its corridor will be required, and as per the Framework Plan these future upgrades will be delivered by the State. It is noted that these upgrades will likely consider a holistic approach to transport whereby the additional capacity could be provided through a combination of public transport and/or additional traffic lanes.

With respect to the CCC, the anticipated traffic volumes are low on the sections east of Evans Road and north of Creamery Road, with volumes of less than 1,000 vehicles per day expected. The volumes are an outcome of the model being prepared to discourage car use with lower capacities, speeds and turn bans to discourage it as a through route for vehicles. This will allow more reliability and speeds for public transport and incentivise cycle movements, consistent with the objectives of the CCC.

The section between the Geelong – Ballan Road and Evans Road will carry in the order of 16,180 vehicles per day, exceeding the target of less than 15,000 vehicles per day. Unfortunately the network is such that these volumes are unavoidable given the role that the link plays in the Western and Northern Growth Areas.

Evans Road, which technically is part of the Clever and Creative Corridor, will carry in the order of 13,450 vehicles per day which is above the target of 15,000 vehicles per day, although this section is not intended to be an urban activated section and will predominantly facilitate the movement of traffic and public transport.

Geelong – Ballan Road will carry less than its target or theoretical volumes at the northern end of the PSP with 15,750 vehicles per day expected, and will be within the range north of the Midland Highway with 22,500 vehicles per day expected. This is likely a result of volumes seeking to access the Geelong Ring Road or beyond.

5 Developer Contributions

5.1 Introduction

The Creamery Road PSP is one of nine PSP's that will be delivered in the NWGGA. These PSP's will be delivered over a 15 to 20 year time frame which adds to the complexity of apportioning infrastructure items that are not located in or adjacent to the subject PSP. Further, planning for the subsequent PSP's are likely to change as they progress at different rates due to a range of factors including planning, environment, land fragmentation and market forces.

5.2 Transport Infrastructure Items

5.2.1 APPROACH

In determining the DCP items for inclusion into a possible Creamery Road DCP, there are a number of considerations that will inform their inclusion, including:

1. Establishing a clear need for the items and its nexus to the PSP (can the PSP be delivered without this item)
2. Adopting a clear hierarchy for the transport items to be included in the DCP. Based on current practice and information presented in this paper, the items would include:
    a. Intersections of "Arterial Roads" with "Connector Roads".
    b. Signalised intersections
    c. The CCC
    d. Bridges and culverts along key connector that are required for the PSP
    e. Items that are required for the benefit of the broader growth area (i.e., Global items)

The DCP will identify the land requirements for the delivery of the ultimate infrastructure item and will deliver the interim infrastructure requirements for 75% of the delivery of the land use.

The DCP should not consider or include the following items:

1. Intersections of "Connector" to "Connector" roads
2. Intersections of "Connector" to "access" and/or "local" roads
3. Uncontrolled VicRoads arterial road access for a subdivision
4. local paths – off-road bike path / shared trail within or abutting development sites, unless specified.
5. road landscaping (within or abutting development sites
6. Duplications or upgrades to the arterial road network outside of the PSP (i.e., Midland Highway Duplication)
7. Level crossing or grade separation of the existing railway line

5.2.2 GLOBAL DCP ITEMS

Discussions with the City have identified five items within the NWGGA that will form global Developer Contributions Plan (DCP) items and will be apportionment to the impending Creamery Road PSP. These are:

- One crossing of the Moorabool River along the alignment of the Clever and Creative Corridor (i.e. south of IN-06 onMidland Highway)

- One crossing of the Moorabool River along the alignment of the Lynburn Road extension (based on a six lane arterial)
- One crossing of the Moorabool Road on the Church Street extension, and
- An active travel bridge on Creamery Road crossing the Geelong Ring Road
- Evans Road

Evans Road between the PSP boundary and the Northern Growth Area will ultimately form part of the Clever and Creative Corridor in accordance with the Framework Plan. The Movement and Access Report and the Planning Panel Report prepared for the NWGGA Framework Plan agreed that the link will provide benefit to the network and resilience for the Geelong Ring Road.

The bridges have also been identified in the Framework Plan as "Infrastructure required to support multiple precincts" and their inclusion in a global DCP is necessary.

Whilst these items sit outside of the PSP, they do provide benefit to all of the nine PSP's that sit within the Growth Area. A bespoke apportionment method would be appropriate for this link, such as traffic usage or population and will be determined as part of the preparation of the DCP.

5.2.3 LOCAL DCP ITEMS AND APPORTIONMENT

With regard to the CRPSP, a "Proximity Approach" is proposed to be adopted for apportioning items to the DCP. This will seek to develop a transparent approach in how apportionment of the transport items is calculated. It is recommended to include the following key principles:

1. Internal intersections and roads allocated to the DCP that are located within the PSP be wholly apportioned to the DCP (100%).
2. Intersections adjacent to or on the border of the PSP boundary will be part-funded by the DCP from the neighbouring PSP dependent on the number of access points to the PSP. For example, a four leg intersection on Ballan Road would be apportioned 50% to Creamery Road PSP and 50% to the Batesford North PSP.
3. Upgrades to state roads would not be funded by the DCP and would be funded externally (likely the State Government), for example the Midland Highway duplication. The calculation of the cost for an intersection would consider these upgrades in their design.
4. Consideration of a proportion of the Clever and Creative Corridor (CCC) to be funded externally given it has a broader role. This could potentially be up to 50%.

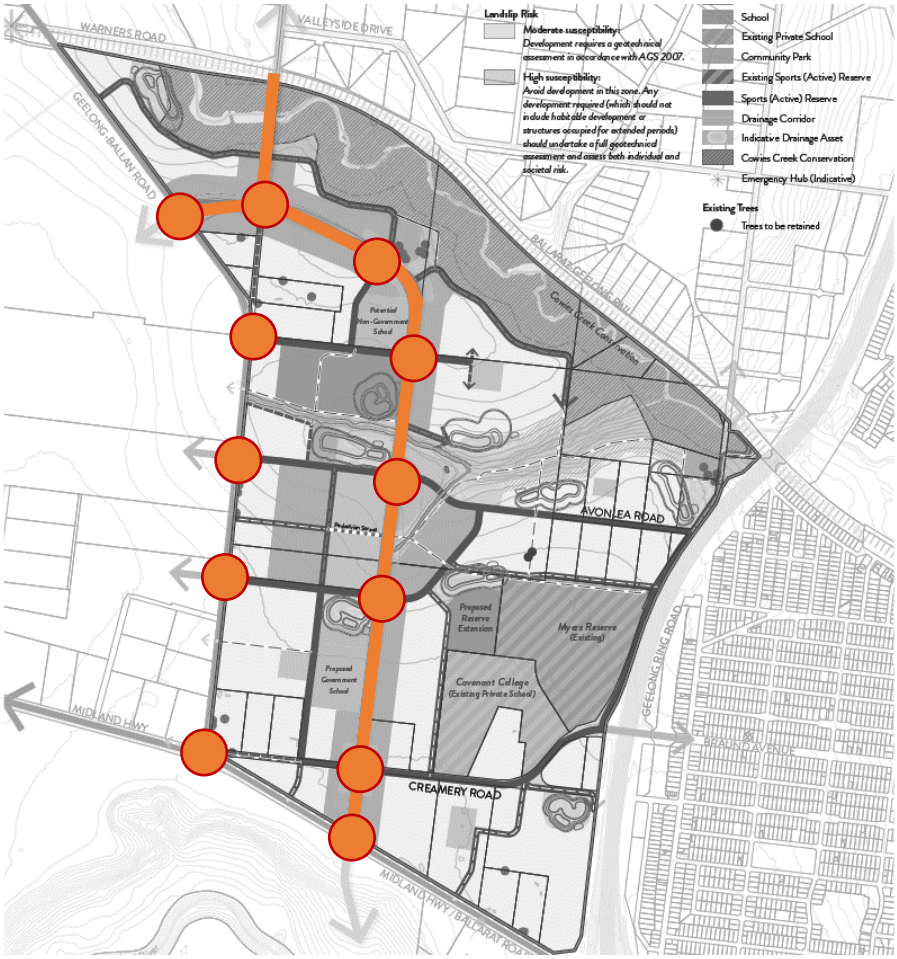
5.2.4 DCP TRANSPORT ITEMS

Having regard for the principles listed in Section 5.2, and the latest FUS, the following transport items *should* be included in a DCP for Creamery Road:

1. Up to 12 intersections with
    a. Six of the intersections are located on the external boundary of the PSP which would have a level of allocation to the adjacent PSP's
    b. Six intersections would be internal to the PSP and would likely be fully apportioned to the DCP
2. The inclusion of the CCC for its length within the CCC.

Figure 15 shows the locations of the intersections and roads that would be included in the DCP.

Figure 5.1: Creamery Road PSP - Possible DCP Items



It is noted that these items are indicative only and subject to consultation with agencies and stakeholders, including the Department of Transport.

6 Next Steps

This report is a working document intended to accompany the draft Future Urban Structure through the agency engagement process. The report will be updated after finalisation of the FUS and will also incorporate any other agency comments and feedback prior to finalising.