



## Final Report

# Barwon Heads Transport & Parking Study

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## Abbreviations

The City	City of Greater Geelong
ABS	Australian Bureau of Statistics
BCCoM	Barwon Coast Committee of Management
PTV	Public Transport Victoria
PBN	Principle Bicycle Network
BH	Barwon Heads
CDZ	Comprehensive Development Zone

## Executive Summary

This study arose from the City's desire to investigate transport movements and parking in Barwon Heads with the aim to promote sustainable movement, improve pedestrian and cycling accessibility and safety and review parking restrictions. The purpose of this study was to identify the key transport issues and opportunities facing Barwon Heads, develop preferred options to address these issues and opportunities, and prepare recommendations. The study examined background information, recent traffic speed / volume and parking data and community engagement responses. The following analyses were undertaken as part of this investigation to assist in the identification of the transport and parking challenges present within the town:

- Policy and Council documentation review;
- Existing conditions assessment;
- Traffic speed and volume data assessment;
- Crash statistic assessment;
- Parking inventory data assessment; and
- Community engagement (Stage 1).

Analysis of the above data and information revealed five main transport and parking challenges currently facing the Barwon Heads community. These challenges are outlined below:

- Traffic congestion, delays and safety;
- Parking provision;
- Pedestrian and cyclist access and safety;
- Public transport; and
- High heavy vehicle traffic.

The above analysis and identified challenges were used to inform the development of numerous transport and parking upgrades/treatments to address specific concerns on the City owned roads in Barwon Heads. The seasonal nature of tourism within Barwon Heads which leads to the increased stress placed on the road networks and parking in the town is evident in the traffic speed / volume and parking data. The proposals were developed to address typical conditions.

These proposed treatments were subject to Stage 2 community engagement feedback, with all concepts receiving overwhelming support and a range of further improvements to consider. The following key improvements are recommended to address community identified transport and parking challenges within Barwon Heads:

- Road Safety:
  - Geelong Road / Hitchcock Avenue – intersection improvements
  - Hitchcock Avenue / Ozone Road – intersection improvements
  - Ozone Road – raised platform intersections at Seaview Avenue and Margate Street
  - Seaview Avenue – chicane treatment/s for traffic calming
  - Carr Street – drainage upgrades
  - Barwon Heads Road Service Road – conversion to one way
  - Thirteenth Beach Road – speed zoning change (Black Rock Road to Surf Life Saving Club)
  - Hitchcock Avenue – speed zoning change (Colite Street to Ozone Road)
- Parking Changes:
  - Hitchcock Avenue – time based parking restrictions (Colite Street to Ozone Road)
  - Hitchcock Avenue – Accessibility Parking Bay Upgrade
  - Bridge Road – time based parking restrictions (Hitchcock Avenue to Grandview Parade)
  - Seaview Avenue – formalising the off-street parking area
- Pedestrian/Bicycle Access:
  - Sheepwash Road – pedestrian refuge island (at Coogee Court )
  - Bridge Road / Golf Links Road – provision of new footpath
  - Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction

- Barwon Heads area – active transport path improvements
- Tait's Road – cycle improvements
- Golf Links Road – footpath and cycle improvements
- Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements
- Carr Street – footpath provision and width for bike lanes/safe passing width
- Thirteenth Beach Road – provision of gravel path
- Safe Travel to School Routes – road stencilling
- Von Nida Avenue – provision of new footpath
- Strategy Items
  - Adopt Sheepwash Road, Carr Street and River Parade to the PBN

An Implementation Plan has been developed that identifies short, medium and long term timeframes to action these recommendations along with considerations for each action.

Larger and broader issues identified in this study are explored as 'Strategic Items' and include:

- Principal Bicycle Network (PBN)
- Safe Route to School (SRTS) Network
- Pedestrian Path Network
- Parking Management
- Planning Assessments/Parking Waivers
- Major Projects
- Public Transport Provision
- Speed Zoning

In reviewing the 'Strategic Items' actions have been identified, where appropriate, for Council to investigate further.



# 1 Introduction

## 1.1 Background

Barwon Heads is a coastal township located along Greater Geelong's south-east coastlines. It has a residential population of 3,875 people (as per ABS 2016 data), however during the summer periods Barwon Heads experiences a significant influx of tourists and holiday makers.

The existing transport network within Barwon Heads has a vehicle movement-based focus. Public transport in and around Barwon Heads is limited, however the active transport network is well utilised by the Barwon Heads community for walking and cycling trips to nearby locations. As a result of the vehicle movement-based focus, traffic and parking are causing friction with the community's expectation of amenity for the township, especially during the busier summer periods.

It is expected that the Barwon Heads population, both local and visitors, will continue to increase. The town is located between the two growth area locations of Armstrong Creek to the north west, and Ocean Grove to the east. Both areas are predicted to grow in size, with the Armstrong Creek development to create a population of around 65,000 people over the next 20 years and Ocean Grove set to grow to around 20,000 people by 2031. This growth will contribute to Barwon Heads' growing visitor population.

## 1.2 Project Details, Objectives and Vision

SMEC has been engaged by the City of Greater Geelong (The City) to conduct a Transport and Parking Study (Study) of the Barwon Heads township. The Study aims to promote sustainable movement by improving pedestrian and cycling accessibility and safety, as well as to review parking controls and provision. It is anticipated that this study will identify some of the key challenges and constraints surrounding the transport network in Barwon Heads. These will inform development of a framework to guide future investment in transport infrastructure, develop community programs and carry out advocacy.

To achieve the vision for safe, sustainable and efficient transport systems that better connect people to their destinations, the following objectives have been identified:

Objective 1 – Identify current and likely future shortcomings in transport and parking within Barwon Heads

Objective 2 – Develop a program for key infrastructure improvement works

Objective 3 – Maintain the coastal village character and informality of local streets

Objective 4 – Identify advocacy priorities

Objective 5 – Achieve a safer road environment

Objective 6 – Identify improvements to public parking

## 1.3 Study Area

The broad study area encompasses the whole of the Barwon Heads township, as illustrated in Figure 1-1, and is generally bound by the following features:

- Northern and eastern boundary – Barwon River;
- Southern boundary – Shoreline of Bass Strait / Thirteenth Beach Road;
- Western boundary – Barwon Heads Settlement Boundary, as per Council's Planning Scheme; and
- Barwon Coast Committee of Management parking area on the Urban Foreshore/Spit Zones.

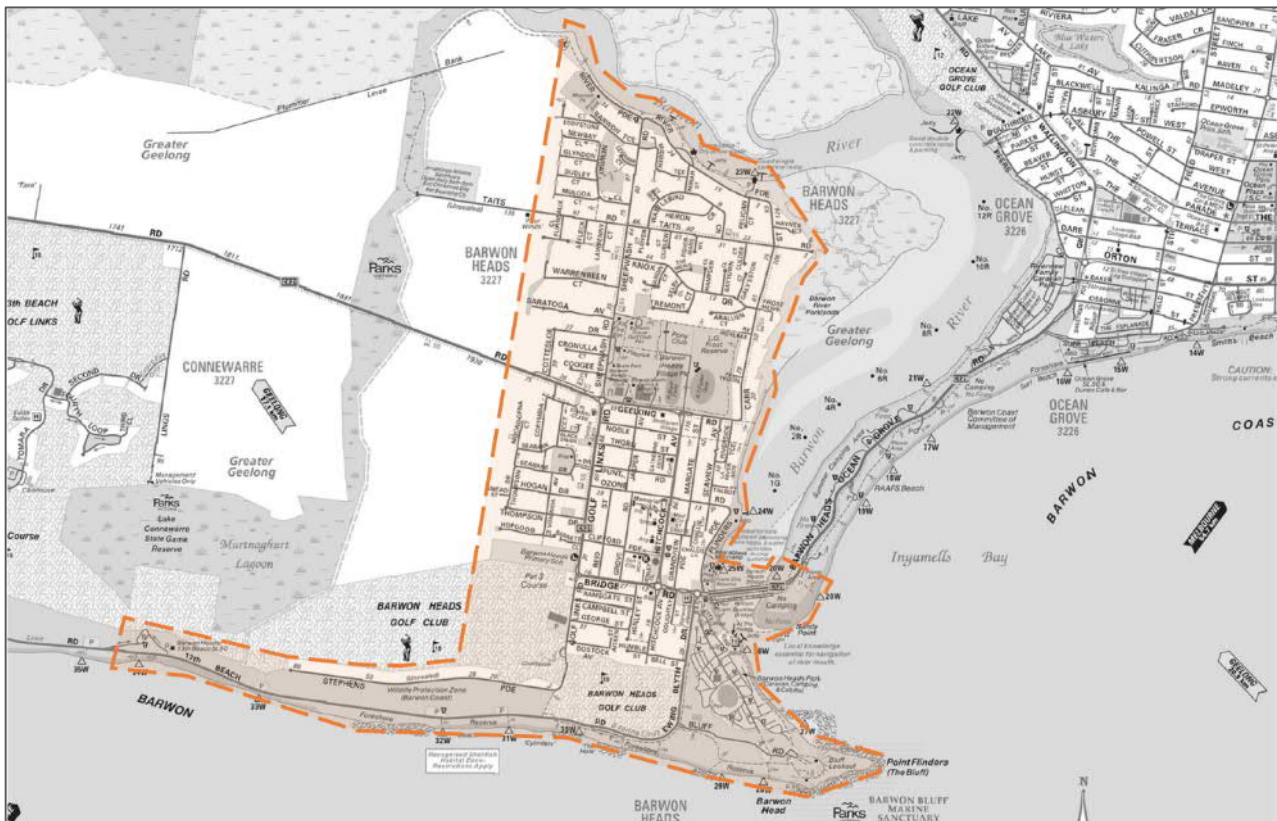


Figure 1-1: Study Area (source: [www.melway.com.au](http://www.melway.com.au))

There is no policy support for an expansion of the western end of the township, as there are significant constraints including impacts of environmental and coastal areas, flooding/climate change and issues around stormwater discharge.

## 2 Policy Context

There are local, state and regional influences on the transport planning within the Barwon Heads locality. The transport and parking analysis work undertaken for this project has been informed by the local, state and regional policies listed in the subsequent sections.

### 2.1 Local Policy

The following Council policies, strategies and plans were considered in the development of this report:



Figure 2-1: Council Transport and Public Realm Strategies

- Greater Geelong – A Clever and Creative Future;  
<https://www.geelongaustralia.com.au/clevercreative/documents/item/8d4d2ad3b2b24c1.aspx>
- The City of Greater Geelong Council Plan 2018-22;  
<https://www.geelongaustralia.com.au/councilplan/default.aspx>  
Integrated Comprehensive Transport Plan;  
<https://www.geelongaustralia.com.au/ictp/documents/item/8d2e39e49715770.aspx> ;
- The City of Greater Geelong Settlement Strategy;  
<https://www.geelongaustralia.com.au/planning/documents/item/8d848164a97b196.aspx> ;
- Barwon Heads Structure Plan; and  
<https://www.geelongaustralia.com.au/strategicplanning/documents/item/8cbc13e6e1024a9.aspx>
- Geelong Road Safety Strategy  
<https://www.geelongaustralia.com.au/roadsafety/documents/item/8d08ccf2829f9de.aspx>

## 2.2 State and Regional Policy

The responsibility for the provision and planning for transport within Greater Geelong is shared between Council and the Victorian Government. The following state and regional policies were considered in the development of this report:

- The Transport Integration Act 2010; and  
<https://www.legislation.vic.gov.au/in-force/acts/transport-integration-act-2010/073>
- G21 Region Road Transport Plan 2017-2027  
<https://www.g21.com.au/g21-region-road-transport-plan-2017-27/>.

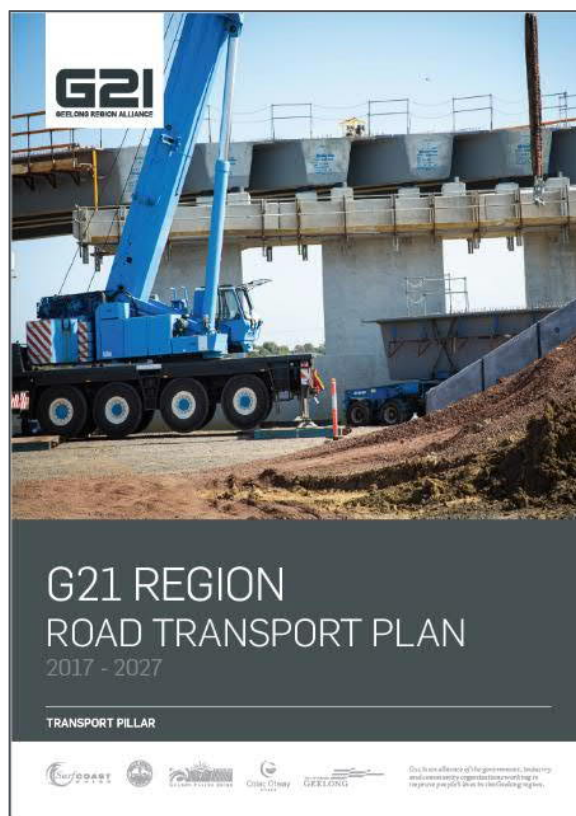


Figure 2-2: G21 Region Road Transport Plan



## 3 Local Context

### 3.1 Land Use

Land use within Barwon Heads consists of a combination of residential and agricultural zoned land, with many nature reserves and parks. Over the last three decades, the role of Barwon Heads has shifted from a primarily residential area where people commute to Geelong, to a key tourist destination. It is now home to many key tourist hotspots.

The commercial centre of Barwon Heads includes the town's major hotel and a strip of shops including cafes and restaurants located along Hitchcock Avenue. North of Barwon Heads is the expansive waterway of Lake Connemawarre and surrounding wetlands, which attracts a number of tourists. Other key land uses within the study area include the Barwon Heads Football and Netball Club, Barwon Heads and District Pony Club, Holy Family Catholic Church, Bop Bop Karrong Kindergarten and Barwon Heads Primary School.

The existing planning zones and land uses within Barwon Heads are depicted in Figure 3-1 and Figure 3-2.

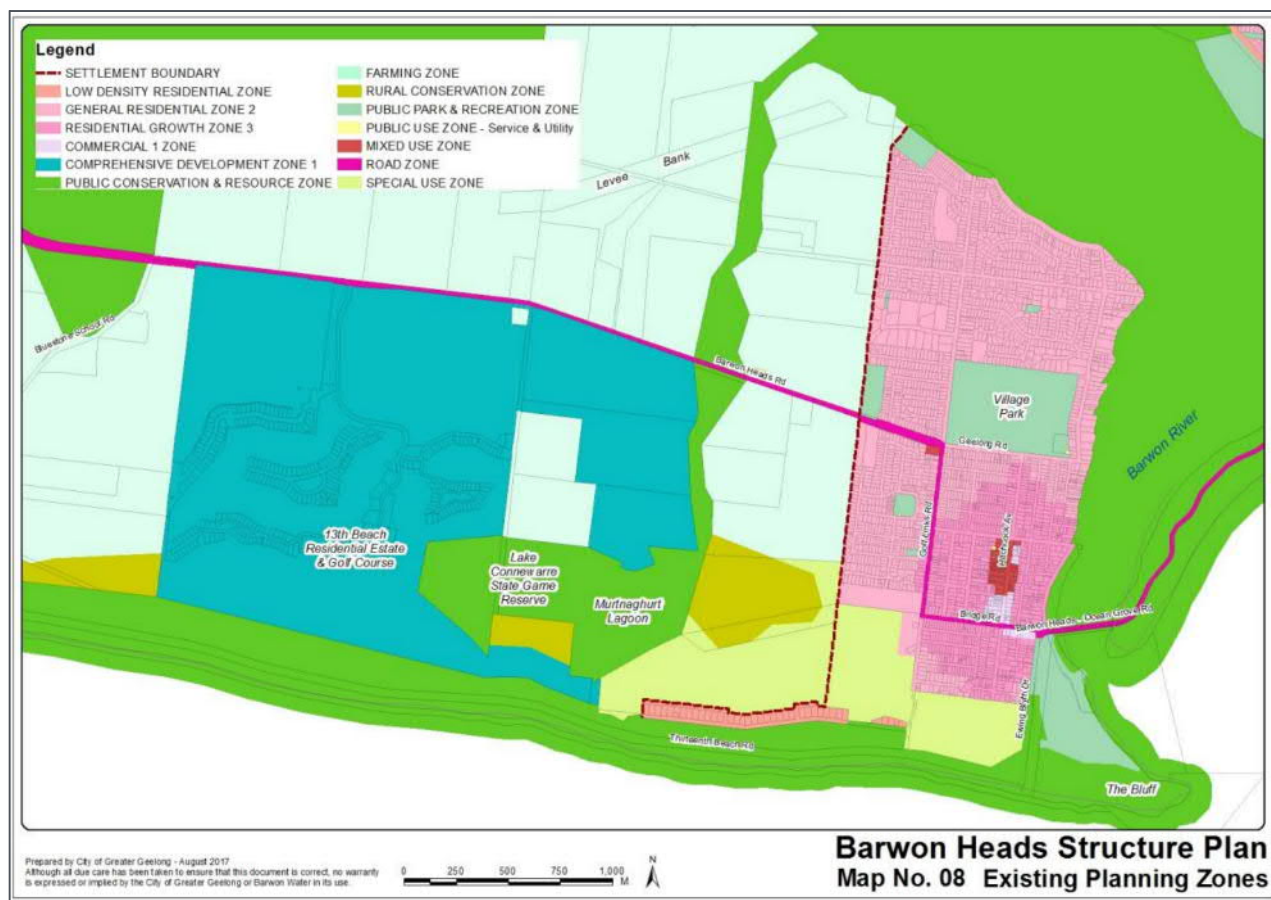


Figure 3-1: Existing Planning Zones (Source: Barwon Heads Structure Plan)



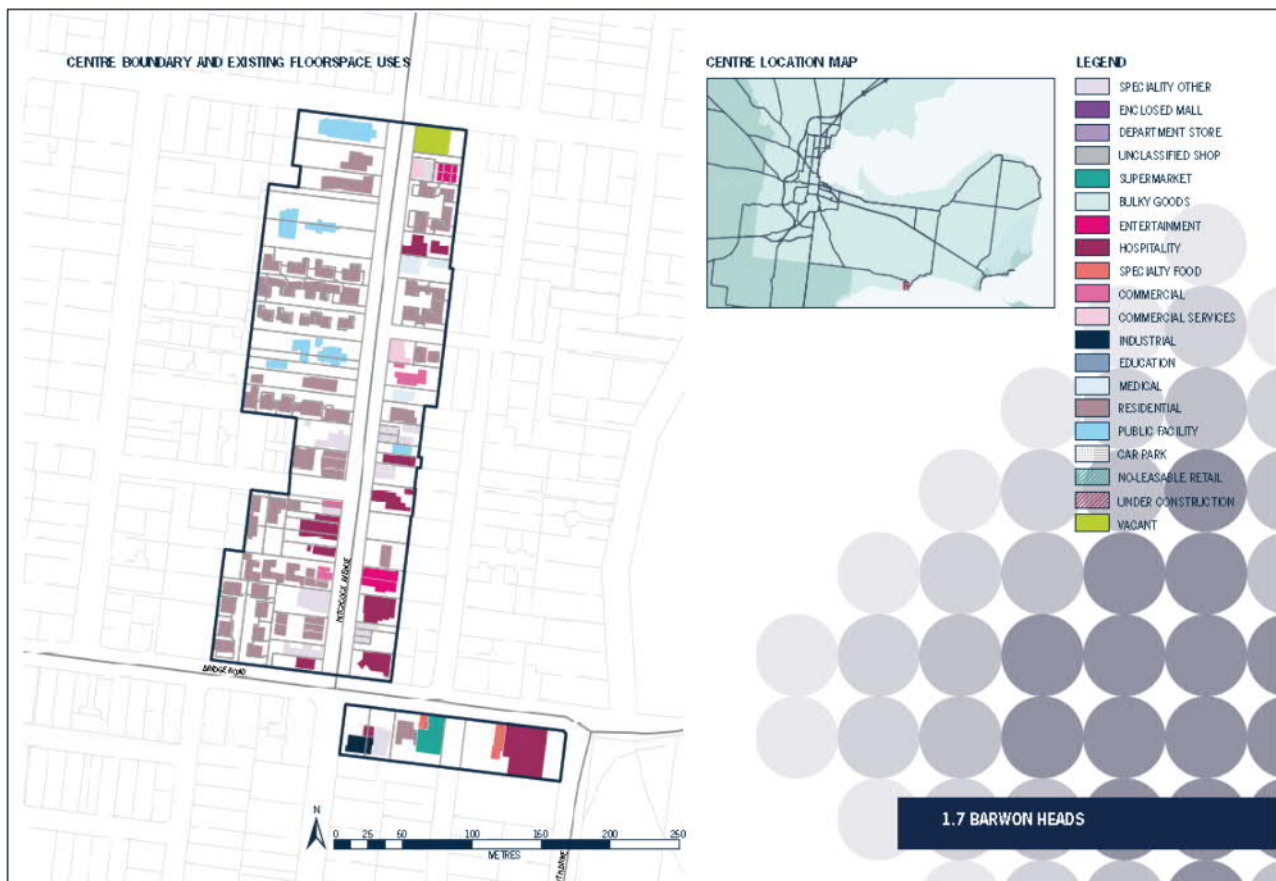


Figure 3-2: Town Centre Existing Floorspace Land Uses (Source: Barwon Heads Structure Plan)

### 3.2 Demographics

Barwon Heads is home to approximately 3,875 people (as per ABS 2016 data). Households are predominately couples with families, making up just under 50% of all households. Couples with no children are the next largest demographic group, consisting of just over one-third of all households.

In 2016, 1,639 people were employed with 50% working full time. Of the working population, a significant proportion work in professional and managerial roles.

The following observations have been made about the Barwon Heads demographics:

- Age structure has shifted over recent decades, with increases to primary school aged children and those within the 35-49 age bracket (Figure 3-3);
- There has been a reduction in the number of retirees (Figure 3-3), although this is expected to grow again significantly by 2031;
- The town experiences significant influx of people in the peak summer holiday season, with moderate vacancy rates experienced in the off season;
- Barwon Heads hosts a relatively wealthy and advantaged population, with low unemployment; and
- Stagnant population growth experienced as available housing supply decreases.

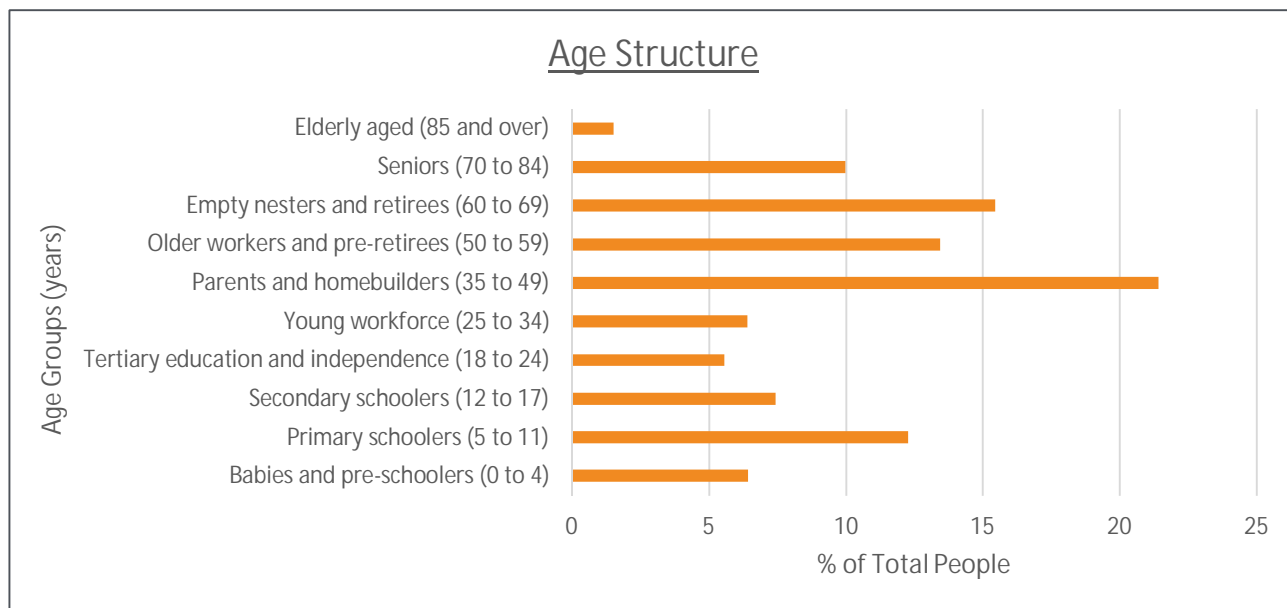


Figure 3-3: Barwon Heads Age Structure (Data Source: ABS, Census of Population and Housing, 2016)

### 3.3 Travel Behaviour

Barwon Heads Road/Golf Link Road/Bridge Road (C121) is the main transport corridor linking Barwon Heads to the wider Bellarine Peninsula. C121 provides a river crossing of Barwon River with the next nearest crossing provided in Breakwater approximately 20km to the north west. This results in pressure on the corridor as a key east-west link for the Bellarine Peninsula region.

Car ownership is on average 1.9 vehicles per dwelling, with less than 3% of households owning no vehicles. As shown in Figure 3-4, the most popular mode of travel to work is by private motor vehicle, with approximately 70% travelling to work by car (as a driver or passenger). Approximately 10% of workers work from home<sup>1</sup>. Active travel modes (such as walking and cycling) are low, with walking consisting of 3% of all users and cycling less than 2.5%.

The during holiday periods (such as school holidays, Easter and Christmas) Barwon Heads experiences an influx of tourists. This influx results in concerns relating to the management of traffic flow and parking provision.

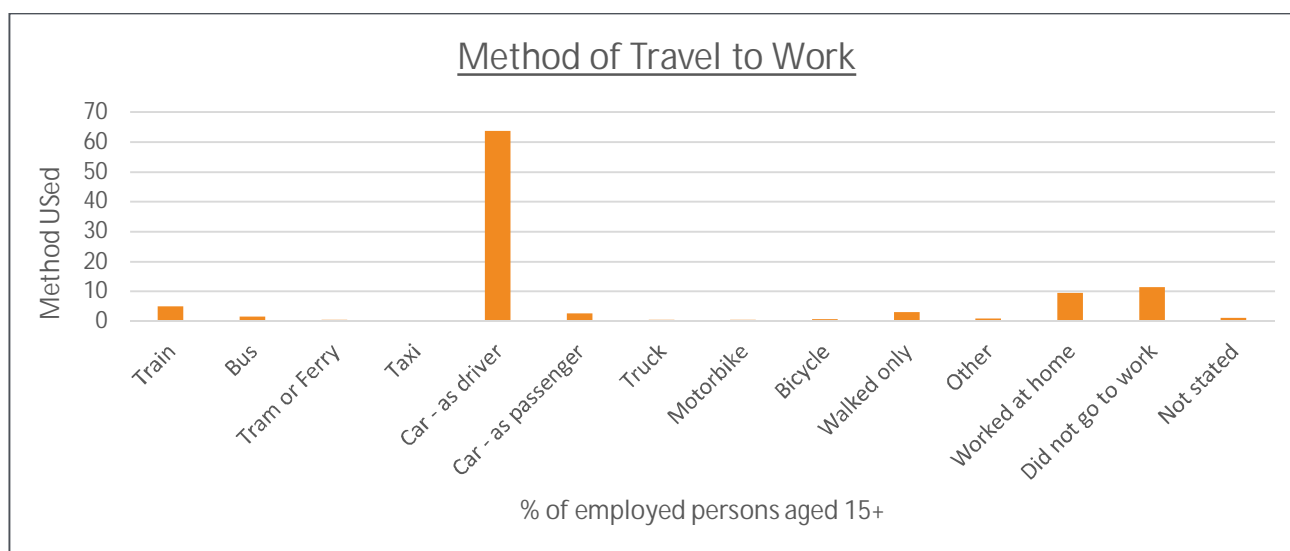


Figure 3-4: Barwon Heads Method of Travel to Work (Data Source: ABS, Census of Population and Housing, 2016)

<sup>1</sup> based on 2016 data. In 2020, the COVID-19 pandemic resulted in significant changes in work related travel behaviour. The Victorian Premier implemented State of Emergency powers requiring working from home for all non-essential workers.

## 4 Existing Conditions

### 4.1 Road Network

Barwon Heads provides two distinct road network layouts. The older portion of the township, located south of Geelong Road, is typically connected via a grid-based network. The newer area, located north of Geelong Road, is connected predominantly through a curvilinear/cul-de-sac road network. These two styles of road network can be seen in the map shown below.

There is a key arterial route which provides access to and through Barwon Heads, being Route C121. The roads along this route are owned and managed by Department of Transport (DoT). The City Road Hierarchy is set out below in Figure 4-2. The road categories, example roads and typical road characteristics are provided in Table 4-1.



Figure 4-1: Key Roads in Barwon Heads (Base Map Source: [www.melway.com.au](http://www.melway.com.au))



Figure 4-2: Municipal Road Network Asset Hierarchy (Source: City of Greater Geelong Municipal Road Management Plan)

Table 4-1: The City Road Hierarchy - Urban Roads and Street

Road Hierarchy Category	Example Roads	Typical Road Characteristics
State Arterial	Barwon Heads Road Bridge Road	+10,000 vehicles per day Caters for service and heavy vehicles 60 km/h speed limit (or above)
Main distributor (Category 4)	Hitchcock Avenue Geelong Road	5,000-10,000 vehicles per day Cater for, but may restrain, service and heavy vehicles 60 km/h speed limit (or less)
Secondary distributor and collector (Category 3)	Carr Street Sheepwash Road	2,000-5,000 vehicles per day Cater for, but may restrain, service and heavy vehicles 50 or 60 km/h speed limit
Residential Street (Category 2)	Jasper Avenue Tait Road	Up to 2,000 vehicles per day Target speed less than 50 km/h
Access Place (Category 2)	n/a	Less than 500 vehicles per day Target speed less than 30 km/h
Access Lane (Category 1)	n/a	Target speed less than 20 km/h

## 4.2 Public Transport

Barwon Heads has a very limited public transport network. Public transport in and around Barwon Heads includes the following:

- Bus Route 55 – Geelong to Ocean Grove via Barwon Heads is the only bus route operating within the township. The service runs (on average) every hour during weekdays (with an increase in frequency during peak times) and every two hours during weekends. On Saturday and Sunday, the service runs approximately every 2 hours with less early morning and later evening buses<sup>2</sup>. The bus route is shown below in Figure 4-3.
- A free shuttle bus, serviced by the Barwon Coast Committee of Management (BCCoM), operates between Barwon Heads and Ocean Grove during the holiday period. The bus operates daily, on the hour, eight times per day.

There is no train line/network within the area. The closest train station is Marshall Railway Station, approximately 14.5km north-west of the Barwon Heads town centre. Marshall Railway Station is a V/Line train station, serviced by the Melbourne-Geelong and Melbourne-Warrnambool services.

There are currently no plans to make changes to the public transport network in the area<sup>2</sup>.

<sup>2</sup> Barwon Heads Structure Plan



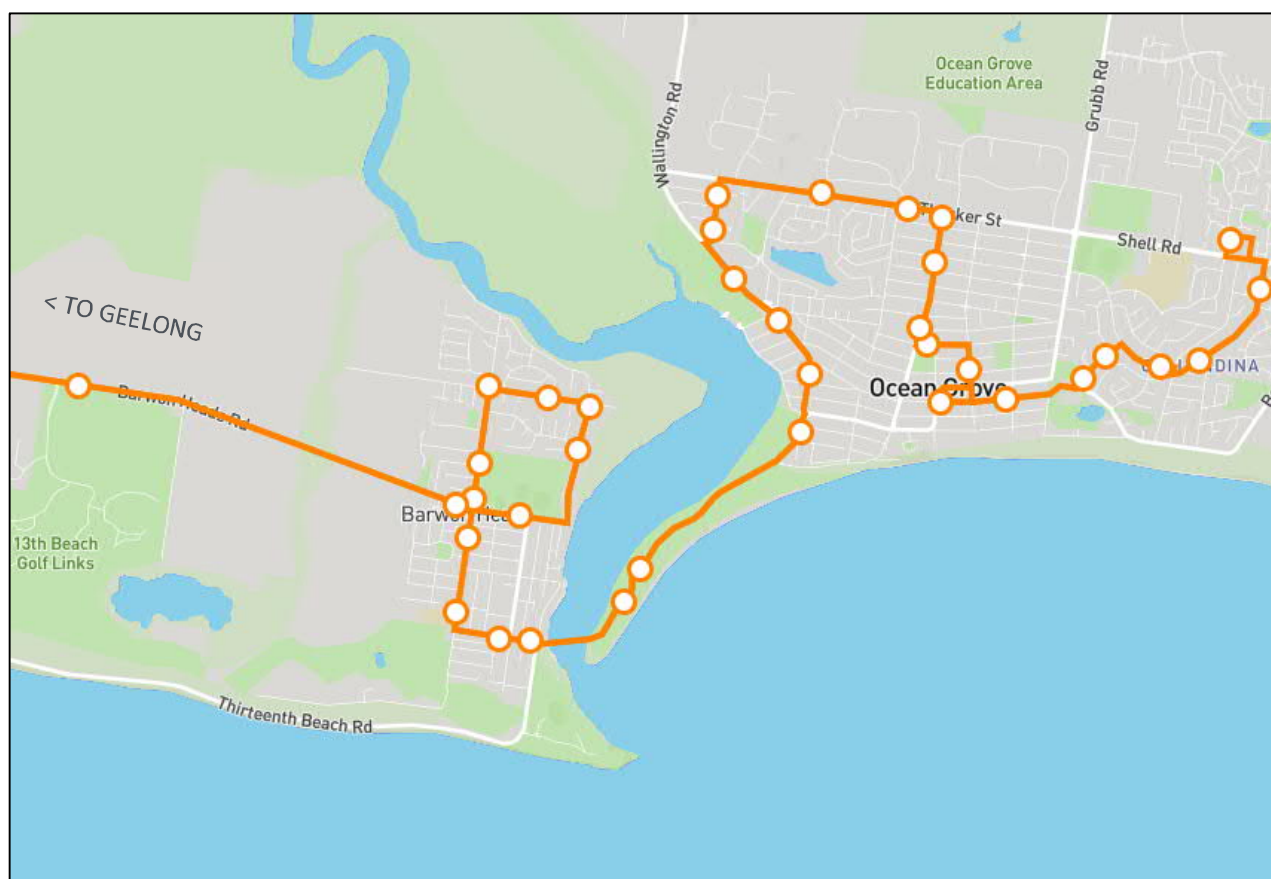


Figure 4-3: Bus Route 55 (Source: PTV)

### 4.3 Pedestrian and Cycling Facilities

The transport network within Barwon Heads accommodates predominantly road-based movements. There is a lack of formal footpaths and cycle lanes, with missing linkages between open space/park areas and the town centre. Intra-township bicycle and pedestrian movements are generally relegated to grassy verges and unsealed roadways.

There are several proposals for improvement projects identified in the City's Cycle Strategy and the G21 Principal Bicycle Network (PBN), although much remains proposed infrastructure. Some of these include:

- Barwon River Parkland – continuous cycle path from the Ring Road Reserve to Barwon Heads;
- Sheepwash Road from the Round the Heads Trail to Barwon Heads Village Park – on-road bicycle lanes;
- Queenscliff to Barwon Heads Link;
- Thirteenth Beach Trail – construction of a shared pathway from the caravan park; and
- Improvements/development of links for Ewing Blyth Road, Thirteenth Beach Road and Bridge Road.

The existing and proposed paths identified in the Cycle Strategy and PBN are shown in Figure 4-4 and Figure 4-5.



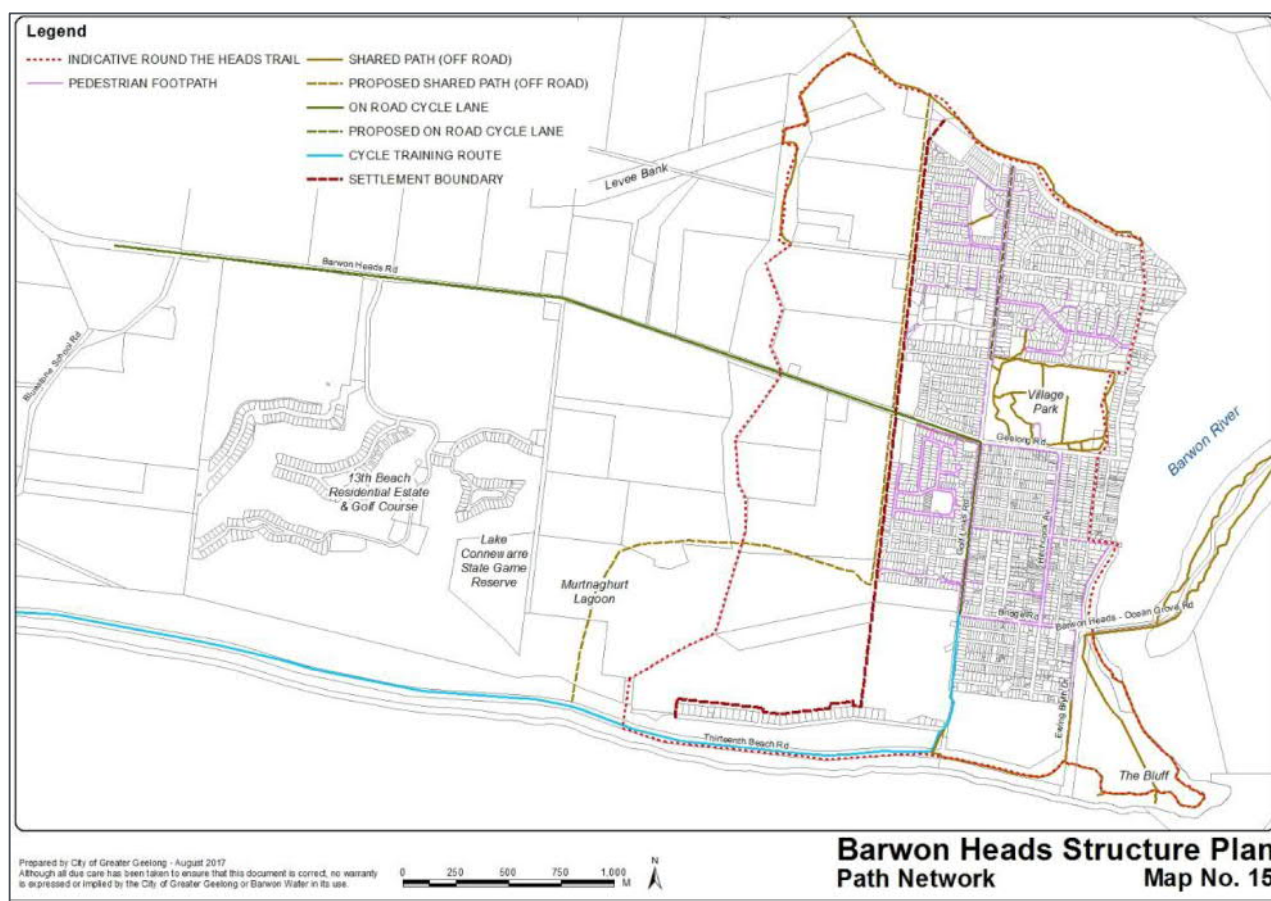


Figure 4-4: Barwon Heads Path Network (Source: Barwon Heads Structure Plan)

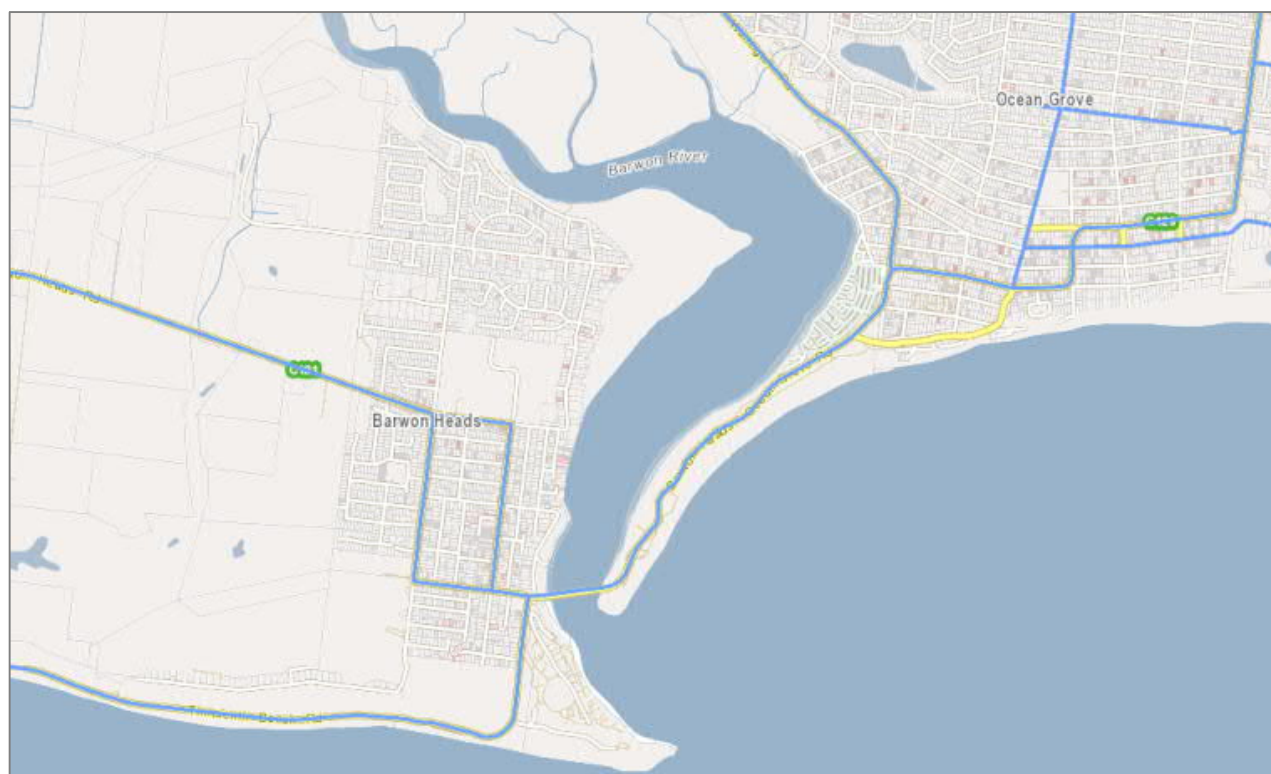


Figure 4-5: Barwon Heads PBN (Source: The City)

### 4.3.1 Cyclists

Barwon Heads is becoming increasingly popular for cyclists, however formal routes predominantly consist of the on-road cycle lanes provided on Route C121.

There are generally two main cyclist types within Barwon Heads. Table 4-2 describes their experience levels and characteristics.

Table 4-2: Cyclist Types – Experience Levels and Characteristics (Austroads AP-G88-17)

Rider Level	Example	Characteristics	Suitable infrastructure
Young / novice	<ul style="list-style-type: none"> <li>Primary School Children</li> </ul>	Cognitive skills and understanding of road rules developing. Skills are basic. Will seek separation from motor vehicles. Desire off-road paths, but can manage occasional crossing of roads and varying traffic conditions.	Separation from motor vehicles is more important than speed. <ul style="list-style-type: none"> <li>Shared paths and separated paths</li> <li>Footpaths (where permitted)</li> </ul>
Advanced	<ul style="list-style-type: none"> <li>Experienced commuters</li> <li>Experienced sports rider</li> <li>Experienced touring rider</li> </ul>	Less affected by motor vehicle traffic. Likely to avoid off-road paths where speed may be reduced. Riders able to share lanes, with preference for dedicated space.	Speed is more important than separation from motor vehicles <ul style="list-style-type: none"> <li>Shared traffic</li> <li>Bicycle lanes</li> <li>Sealed shoulders</li> </ul>

### 4.3.2 Pedestrians

Formal pedestrian facilities are found in higher concentrations near the primary school and village commercial centre. The commercial centre provides a concrete path network with a number of zebra crossings (both raised and at road grade). The residential areas of Barwon Heads tend to retain the traditional coastal amenity through the provision of sealed road, grass table drains and grassed verges (no kerb and channel or footpaths).

## 4.4 Car Parking

Parking restrictions within Barwon Heads are limited mostly to the southern end of Hitchcock Avenue, with majority of on-street parking available being unrestricted. There are five off-street parking areas within the study area, these include:

- Frank Ellis Reserve (Flinders Parade indented off-street parking spaces);
- Bridge Car Park (access off Ewing Blyth Drive);
- Jetty Road off-street car park;
- Barwon Heads Hotel off-street car park; and
- The Spit off-street car park.

During the busy summer periods parking can become congested around the town centre, especially along Hitchcock Avenue, Flinders Parade and at the beach parking areas. Parking is considered a main challenge by the community as expected with the influx of visitors during holiday periods. Parking is raised as a key challenge by the community.

## 4.5 Future development

### 4.5.1 Land Development

As per the Barwon Heads Structure Plan (2017), Barwon Heads is to remain focused on development geared towards tourism as the essential part of its vitality and economic future. The Geelong and Bellarine Tourism Development Strategy notes that tourism visitation is anticipated to increase both from overnight and day-trippers, with these numbers influenced by growth areas in Armstrong Creek. Furthermore, as per the policies of the G21 Regional Growth Plan and the Greater Geelong Planning Scheme, Barwon Heads is discouraged from provision of land for industry or warehouse use, with the township continuing to rely on the supply of industrial and warehouse zoned land within Geelong, Drysdale and Ocean Grove.

To accommodate increased numbers of tourists to the area, key opportunities have been identified in the tourism strategy including a gap of nature-based cabins and hotel accommodation. There is also a need for reinvestment of existing commercial accommodation and caravan parks. BCCoM is likely to develop future master plans prepared for the specific management of issues or areas of coastal land, including for the caravan park and the need for the future upgrades or redevelopment and management of car parking. This is illustrated in Figure 4-6.

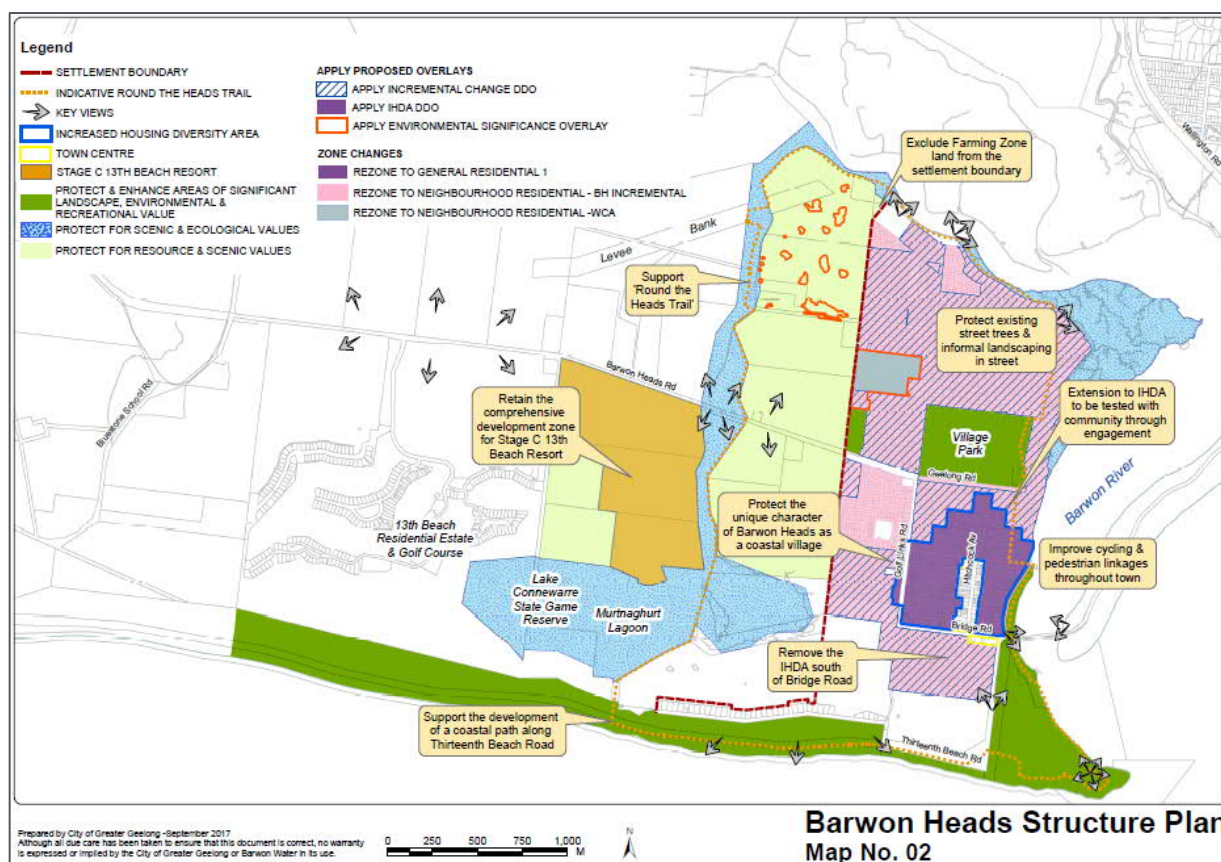


Figure 4-6: Barwon Heads Structure Plan – Future Planning (Source: Barwon Heads Structure Plan)

While there are limited opportunities for future development in Barwon Heads, it is anticipated that some development will occur. This is summarised below.

#### 4.5.2 Tourism

The Bellarine South area is comprised of both Barwon Heads and Ocean Grove and in 2018, it was found that the Bellarine South subregion visitation was 924,424, capturing 16% of total visitation to Greater Geelong and The Bellarine region<sup>3</sup>. Of these 924,424 people, 62% of total visitors were overnight visitors and only 38% were on a day trip. Tourism is essential to the overall vitality and economic future of Barwon Heads, and the popularity of the town is due to its many natural features, beaches, parklands and recreational activities.

Due to the existing settlement boundaries, Barwon Heads is not identified as a town that will play a growth role under the G21 Regional Growth Plan but will play an important tourism role to the surrounding areas. As stated in the Barwon Heads Structure Plan, tourism visitation is anticipated to increase both from overnight trips and day-trippers. The seasonal nature of tourism within Barwon Heads leads to the increased stress placed on the road networks and parking in the town. It is important that the continued sustainable growth of tourism is supported, provided that it respects the overall character and operation of the town.

<sup>3</sup> Geelong and the Bellarine Tourism Development Plan



## 5 What the Community Told Us

Community Engagement Stage 1 invited members of the community to provide feedback to inform the Barwon Heads Transport and Parking Study. Local residents, business owners and visitors were asked to contribute by identifying the key transport, parking, pedestrian and cyclist issues and opportunities within the area. The City used the “Have Your Say” portal on the City’s website to gather feedback, suggestions and opportunities from the community in this ‘Stage 1 Engagement’ process. Figure 5-1 provides a snapshot to the community’s response. The community has clearly highlighted key locations for this study to consider. A detailed list of issues and opportunities is provided at Appendix A.

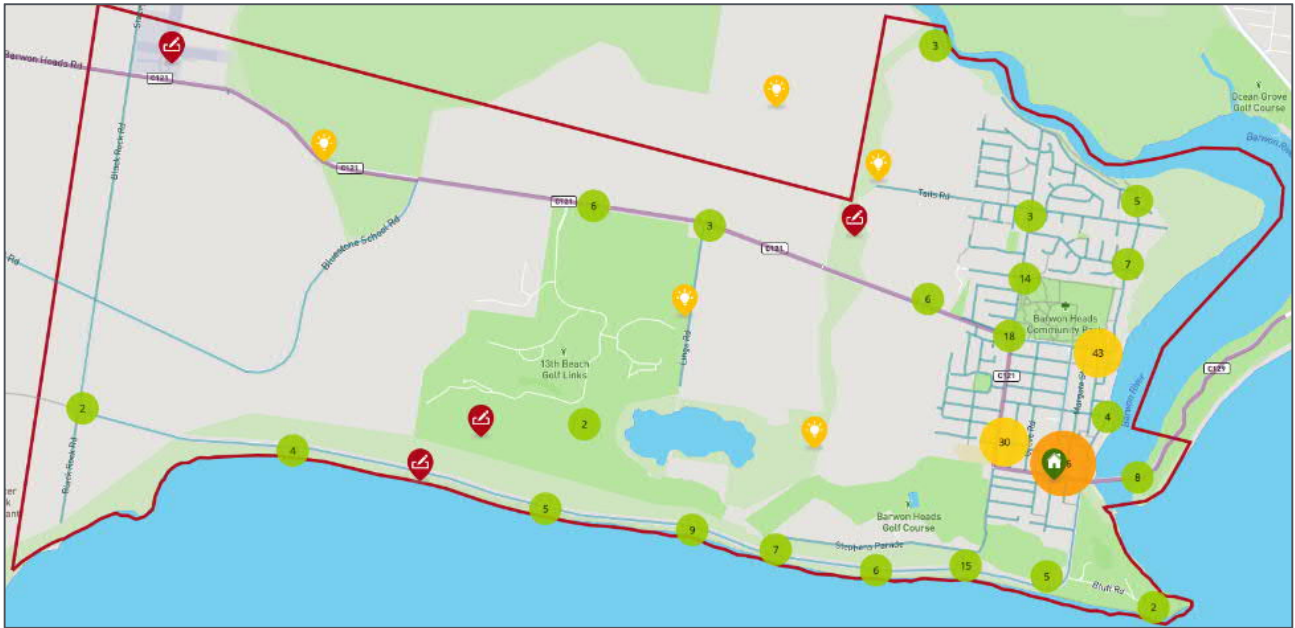


Figure 5-1: Community Engagement Survey Responses

Nearly 400 submissions were received, including a submission by the Barwon Heads Association. All feedback was assessed, and the following key themes were identified:

1. Traffic congestion, delays and safety;
2. Parking provision;
3. Pedestrian and cyclist access and safety;
4. Public transport; and
5. High heavy vehicle traffic.

Figure 5-2 represents the percentage of responses made in each of the five categories identified above. These themes are discussed further in the subsequent sections.

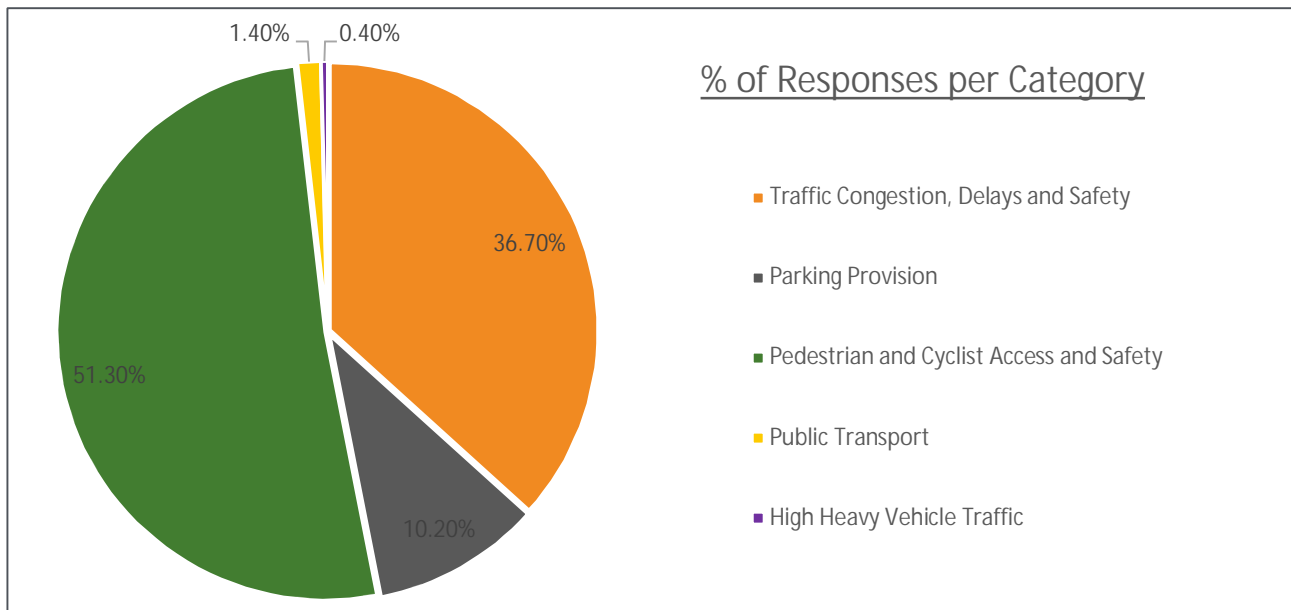


Figure 5-2: Response Results Per Category (% of Total)

## 5.1 Key Challenge Categories

### 5.1.1 Traffic Congestion, Delays and Safety

Traffic congestion, delays and safety challenges were the second most commonly referenced category raised by the community. The City received 182 responses relating to this challenge category, contributing to 37.1% of all responses.

Within the Traffic Congestion, Delays and Safety category, six main feedback areas emerged as being the centre of the community's concern. These included:

1. Safety Issues and Congestion at Intersections and Roundabouts;
2. Speed Limit Issues;
3. Congested Roads and Traffic Flow Concerns;
4. Road Quality Concerns;
5. Rat Runs; and
6. Other.

Figure 5-3 summarises the percentage split of the six Traffic Congestion, Delays and Safety sub-categories mentioned by the community. Each concern is discussed in more detail in the subsequent sections.

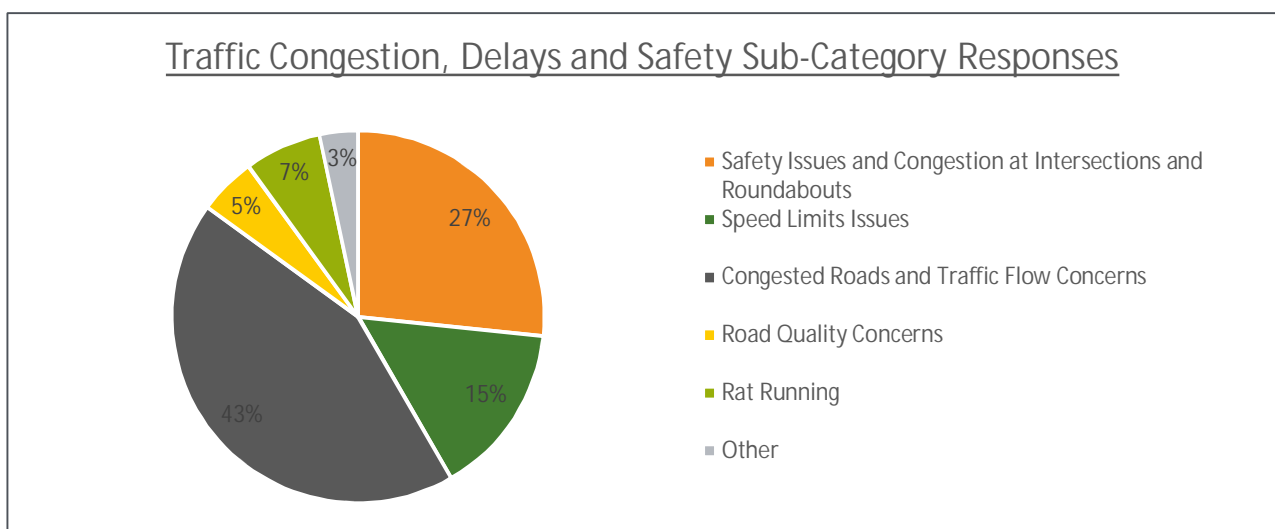


Figure 5-3: Traffic Congestion, Delays and Safety Sub-Category Responses (% of total)



### 5.1.1.1 Congested Roads and Traffic Flow Concerns

Congested Roads and Poor Traffic Flow concerns were the most commonly referenced Traffic Congestion, Delays and Safety sub-category raised by the community. The City received 78 responses relating to this challenge, contributing to 43% of all Traffic Congestion, Delays and Safety responses.

Of these responses, Bridge Road and Geelong Road were mentioned most frequently. The community has identified Bridge Road as being congested, with overall poor traffic flow, both along the main road and across the Bridge. Subsequently, Geelong Road was identified as a possible location for a second River crossing. The table below summarises the community responses.

Table 5-1: Locations Identified by the community as being congested with Traffic Flow Concerns

Location	General Concerns	No. of Comments
Geelong Rd*	<ul style="list-style-type: none"> <li>Comments in favour and against a new bridge along Geelong Road</li> </ul>	29
Bridge Rd*	<ul style="list-style-type: none"> <li>At the Bridge – roads are congested with traffic flow concerns</li> </ul>	14
Ozone Rd	<ul style="list-style-type: none"> <li>Road very narrow</li> <li>No separation between modes / reduced visibility</li> <li>Congestion</li> </ul>	8
Golf Links Rd*	<ul style="list-style-type: none"> <li>Congested area near the school</li> </ul>	7
Barwon Heads Rd*	<ul style="list-style-type: none"> <li>Unnecessary through traffic congest roads within the town</li> </ul>	7
Clifford Pde	<ul style="list-style-type: none"> <li>Road is too narrow to cater for traffic</li> </ul>	4
Grove Rd	<ul style="list-style-type: none"> <li>Road too narrow and congested</li> </ul>	3
Reid St	<ul style="list-style-type: none"> <li>Congested road</li> <li>No separation between modes</li> </ul>	2
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Link into town requires improvement</li> </ul>	1
Fourteenth Rd	<ul style="list-style-type: none"> <li>Connectivity concerns</li> </ul>	1
Grandview Pde	<ul style="list-style-type: none"> <li>Potential to make the road one way to manage traffic flow</li> </ul>	1
Entire Barwon Heads Area	<ul style="list-style-type: none"> <li>Traffic congestion and bottlenecks are present throughout the town</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

### 5.1.1.2 Safety Issues and Congestion at Intersections and Roundabouts

Intersection and roundabout concerns were the second most commonly referenced Traffic Congestion, Delays and Safety sub-category raised by the community. The City received 48 responses relating to this challenge, contributing to 27% of all Traffic Congestion, Delays and Safety responses. Table 5-2 summarises the intersections and roundabouts identified by the community.

Table 5-2: Safety Issues and Congestion at Intersections and Roundabouts as Identified by the Community

Location	General Concerns	No. of Comments
Bridge Rd / Hitchcock Ave*	<ul style="list-style-type: none"> <li>Congested roundabout</li> <li>Traffic flow concerns</li> <li>Pedestrian crossings causing traffic delay</li> </ul>	24
Barwon Heads Rd / Sheepwash Rd / Golf Links Rd / Geelong Rd*	<ul style="list-style-type: none"> <li>Safety and congestion concerns at roundabout (especially during school times)</li> </ul>	7
Geelong Rd / Hitchcock Ave*	<ul style="list-style-type: none"> <li>Safety concerns at intersection</li> <li>Signage is confusing and unclear – often confuses drivers</li> </ul>	5

Location	General Concerns	No. of Comments
Hitchcock Ave / Ozone Rd	<ul style="list-style-type: none"> <li>Safety and congestion concerns at intersection</li> <li>Concerns about vehicle speeds</li> </ul>	5
Barwon Heads Rd / Lings Rd**	<ul style="list-style-type: none"> <li>Safety concerns at intersection</li> </ul>	4
Barwon Heads Rd / Tomara Dve**	<ul style="list-style-type: none"> <li>Safety concerns at intersection</li> </ul>	2
Bridge Rd / Golf Links Rd*	<ul style="list-style-type: none"> <li>Congested intersection</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

\*\* Lings Road and Tomara Drive are outside study area.

#### 5.1.1.3 Speed Limit Issues

The City received 27 responses relating to speed limit concerns, contributing to 15% of all Traffic Congestion, Delays and Safety responses. Barwon Heads Road and Thirteenth Beach Road were mentioned most frequently, both raising concerns of whether the speed limit was too high for the road. Table 5-3 summarises the community responses received in relation to speed.

Table 5-3: Roads with Speed Issues as identified by the Community

Location	General Concerns	No. of Comments
Barwon Heads Rd	<ul style="list-style-type: none"> <li>Speed limit too high</li> <li>Lack of speed limit signage</li> </ul>	13
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Speed limit too high</li> </ul>	7
Riverside Tce	<ul style="list-style-type: none"> <li>Concerns related to cars speeding</li> </ul>	2
Geelong Rd*	<ul style="list-style-type: none"> <li>Speed limit being too high</li> </ul>	2
Bridge Rd*	<ul style="list-style-type: none"> <li>Speed limit being too high</li> </ul>	1
Hitchcock Ave	<ul style="list-style-type: none"> <li>Concerns related to cars speeding</li> </ul>	1
Sheepwash Rd	<ul style="list-style-type: none"> <li>Concerns related to cars speeding</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

#### 5.1.1.4 Road Quality Concerns

Nine responses relating to road quality concerns were received equating to 5% of total responses. The community identified the following roads as having quality issues:

Table 5-4: Locations Identified by the community as having quality issues

Location	General Concerns	No. of Comments
Carr St	<ul style="list-style-type: none"> <li>Identified as requiring kerbs and channelling</li> </ul>	4
Seaview Ave	<ul style="list-style-type: none"> <li>Currently an unsealed road that floods frequently</li> </ul>	1
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Overall road quality was identified as being a concern</li> </ul>	4

#### 5.1.1.5 Rat Runs

The City received 12 responses relating to concerns about rat runs, therefore contributing to 7% of all Traffic Congestion, Delays and Safety responses. The community identified the following streets as being popular for rat running:

Table 5-5: Routes identified by the community as being popular for rat running

Location	No. of Comments
Ozone Rd	5

Location	No. of Comments
Flinders Pde	3
Margate St	2
Seaview Ave	2

### 5.1.2 Parking Provision

Parking Provision challenges were the third most commonly referenced category raised by the community. The City received 50 responses relating to this challenge category, contributing to 10.2% of all responses.

Within the Parking Provision category, five main feedback areas emerged as being the centre of the community's concern. These included:

1. Lack of parking;
2. Desire for parking variety (e.g. loading zones, accessibility parking);
3. Signage;
4. Desire for tighter parking restrictions; and
5. Parking requirements in new developments.

Figure 5-4 summarises the percentage split of the five Parking Provision sub-categories mentioned by the community. Each concern is discussed in more detail in the subsequent sections.

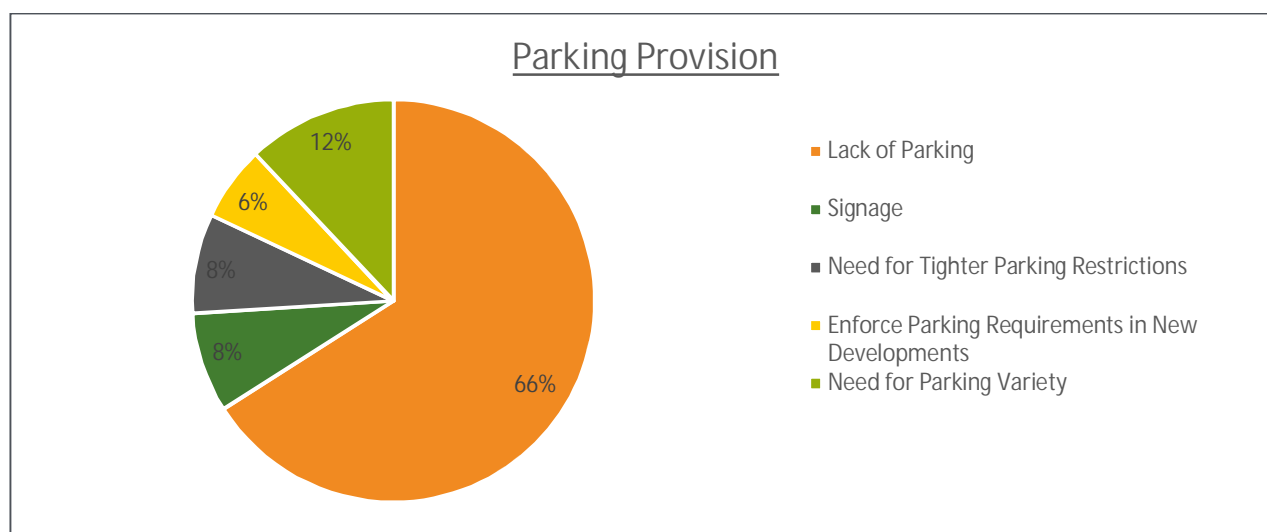


Figure 5-4: Parking Provision Sub-Category Responses (% of total)

#### 5.1.2.1 Lack of Parking

The City received 33 responses relating to the lack of parking within Barwon Heads, contributing to 66% of all Parking Provision responses and being the most mentioned Parking Provision concern. The following areas were identified by the community as currently having parking provision issues:

Table 5-6: Areas identified by the community as having parking provision issues

Location	No. of Comments
Hitchcock Ave	17
Clifford Pde	9
Thirteenth Beach Rd	4
Bridge Rd*	2
The Entire Barwon Heads Area	1

\* Parking is managed by the City on RRV roads, in consultation with RRV.

#### 5.1.2.2 Desire for Parking Variety

Concerns regarding the Desire for Parking Variety were the second most commonly referenced Parking Provision sub-category by the community. The City received six responses relating to this challenge, contributing to 12% of all Parking Provision responses. Geelong Road was mentioned four times, with the community identifying the road as having the opportunity to provide additional varied parking. Ewing Blyth Road and Golf Links Road were also mentioned as being appropriate locations for more disabled parking.

#### 5.1.2.3 Signage

The City received four responses relating to parking signage, equating to 8% of all Parking Provision responses. Golf Links Road was mentioned once as requiring more parking signage, with the other three responses referring to Barwon Heads as a whole.

#### 5.1.2.4 Desire for Tighter Parking Restrictions

Equalling that to Signage, four community responses related to the Desire for Tighter Parking Restrictions, also equating to 8% of all Parking Provision responses. The community identified Bluff Road as requiring tighter parking restrictions, with three responses being concerned with the length of time people park along the road. Additionally, the broader Barwon Heads area was also mentioned three times as generally requiring more time-limited parking.

#### 5.1.2.5 Parking Requirements in New Developments

The community raised concerns regarding the planning approval process for new developments and associated parking requirements.

### 5.1.3 Pedestrian and Cyclist Access and Safety

Pedestrian and Cyclist Access and Safety challenges were the most commonly referenced category raised by the community. The City received 252 responses relating to this category, contributing to 51.3% of all responses.

Within the Pedestrian and Cyclist Access and Safety category, three main feedback areas emerged as being the centre of the community's concern. These included:

1. Safety;
2. Active transport links; and
3. Infrastructure quality.

Figure 5-5 summarises the percentage split of the three Pedestrian and Cyclist Access and Safety sub-categories mentioned by the community. Each concern is discussed in more detail in the subsequent sections.

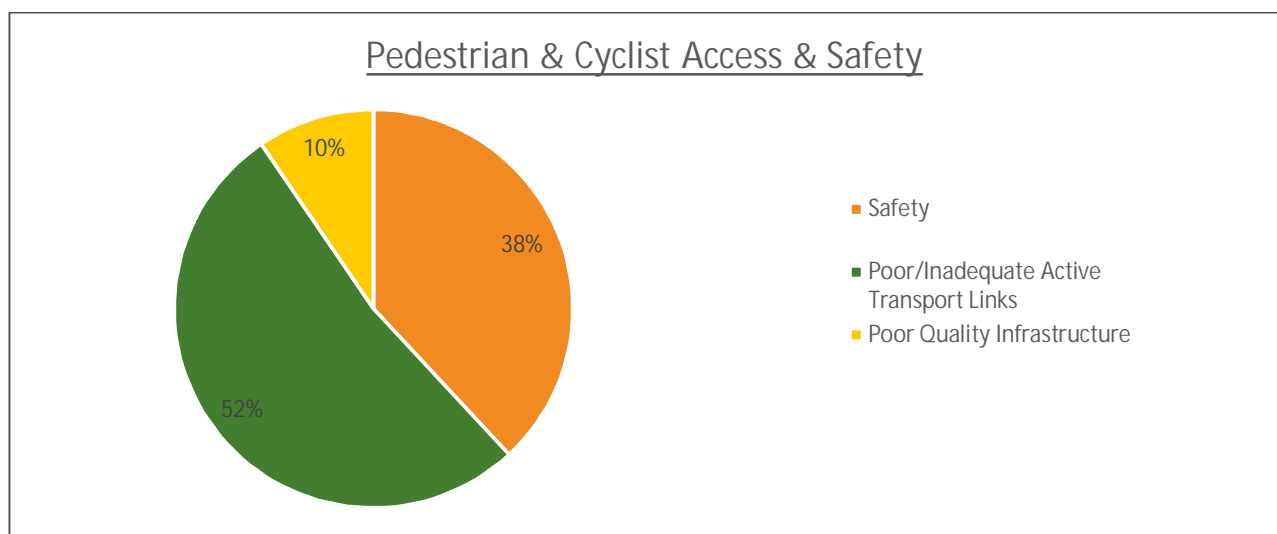


Figure 5-5: Pedestrian and Cyclist Access and Safety Sub-Category Responses (% of total)

### 5.1.3.1 Safety

Safety was the second most commonly referenced concern among all Pedestrian and Cyclist Access and Safety responses. The City received 96 comments relating to this challenge category, contributing to 38% of all Pedestrian and Cyclist Access and Safety responses. Table 5-7 summarises the locations which were identified by the community as being unsafe for pedestrians and/or cyclists:

Table 5-7: Identified Locations with Pedestrian and Cyclist Safety Concerns

Location	General Concerns	No. of Comments
Bridge Rd*	<ul style="list-style-type: none"> <li>Hitchcock Ave roundabout – pedestrian crossings are too close to the roundabout – pedestrian safety concerns</li> <li>Ewing Blyth Dve roundabout – traffic volumes, proximity to bridge and active transport users safety concerns</li> </ul>	23
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Safety concerns for cyclists</li> </ul>	23
Sheepwash Rd	<ul style="list-style-type: none"> <li>Safety concerns for crossing at Saratoga Ave and the path leading into the Barwon Heads Community Park</li> <li>Safety concerns for on road cyclists between Tait's Rd and Cottesloe Dve</li> </ul>	12
Barwon Heads Rd*	<ul style="list-style-type: none"> <li>Roundabout with Sheepwash Rd/Golf Links Rd/Geelong Rd - safety concerns for crossing pedestrians and cyclists</li> <li>Safety concerns with crossing to Tomara Dve and near the Airport</li> </ul>	11
Carr St	<ul style="list-style-type: none"> <li>Pedestrians travel along the road - desire for formal footpaths</li> </ul>	10
Ewing Blyth Dve	<ul style="list-style-type: none"> <li>Safety concerns for pedestrians</li> <li>Intersection with Bridge Rd - safety concerns for all road users</li> </ul>	6
Flinders Pde	<ul style="list-style-type: none"> <li>Pedestrians safety concerns near the beach access road due to vehicles speeds and high pedestrian activity</li> </ul>	5
Ozone Rd	<ul style="list-style-type: none"> <li>Safety concerns for active transport route to the school</li> </ul>	3
River Pde	<ul style="list-style-type: none"> <li>No road separation between cars and cyclists</li> <li>Low visibility between the transport modes</li> </ul>	2
Barwon Heads – Ocean Grove Rd*	<ul style="list-style-type: none"> <li>Safety concerns for pedestrian crossing on the Ocean Grove side</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

### 5.1.3.2 Active Transport Links

Comments relating to active transport links made up 52% of all Pedestrian and Cyclist Access and Safety responses, therefore being the most mentioned challenge by the community. The City received 132 comments relating to the desire to improve active transport links. Comments related to congestion, and whether existing active transport infrastructure was coping with demand, areas where new infrastructure is required or upgrades to existing is desired, connectivity, etc. Table 5-8 summarises the specific locations which were identified by the community:

Table 5-8: Locations Identified with Active Transport Link Challenges

Location	General Concerns	No. of Comments
Bridge Rd*	<ul style="list-style-type: none"> <li>Hitchcock Ave roundabout congestion concerns</li> </ul>	54



Location	General Concerns	No. of Comments
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Desire for improved active transport links within and around the Thirteenth Beach Estate</li> <li>Desire for improved active transport connectivity to and around the Thirteenth Beach Life Saving Club</li> <li>Desire for improved connectivity from this area to the Barwon Heads town centre</li> </ul>	22
Barwon Heads Area	<ul style="list-style-type: none"> <li>Desire for more, and better connected, active transport links throughout the town</li> </ul>	11
Golf Links Rd*	<ul style="list-style-type: none"> <li>Desire for improved paths</li> <li>No formal pedestrian crossing at Bridge Rd intersection</li> <li>Missing links in footpath network</li> <li>Desire for a pedestrian crossing at Ozone Rd</li> </ul>	11
Stephens Pde	<ul style="list-style-type: none"> <li>Desire for improved active transport connectivity at the west end of the road (where the path ends)</li> </ul>	8
Carr St	<ul style="list-style-type: none"> <li>Desire for a separated active transport path</li> </ul>	6
Hitchcock Ave	<ul style="list-style-type: none"> <li>Congested paths</li> <li>Desire for improved connectivity to other streets</li> </ul>	5
Taits Rd	<ul style="list-style-type: none"> <li>Desire for improved active transport connectivity</li> </ul>	5
Flinders Pde	<ul style="list-style-type: none"> <li>Crossings desired near beach access road</li> <li>Crossing at Bridge Road intersection is too close to the roundabout</li> </ul>	4
Barwon Heads – Ocean Grove Rd*	<ul style="list-style-type: none"> <li>Desire to extend Boardwalk (on Ocean Grove side)</li> <li>Location of walking track along the river considered too close to the water</li> </ul>	2
Sheepwash Rd	<ul style="list-style-type: none"> <li>Bike paths quality concerns</li> <li>Opportunity to have a mountain bike course</li> </ul>	2
Barwon Heads Rd*	<ul style="list-style-type: none"> <li>Desire for a connection for Thirteenth Beach Estate residents to the town centre</li> </ul>	1
Lings Rd**	<ul style="list-style-type: none"> <li>Desire for a connection for Thirteenth Beach Estate residents to the town centre</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

\*\* Lings Road is outside study area.

### 5.1.3.3 Infrastructure Quality

The City received 24 comments relating to Infrastructure Quality within Barwon Heads, therefore making up 10% of all Pedestrian and Cyclist Access and Safety responses. General concerns related to the quality of active transport infrastructure (i.e. unsealed pedestrian/cyclist paths, lack of mode separation, uneven paths, etc.). The community identified the following locations having quality concerns:

Table 5-9: Locations Identified with Infrastructure Quality

Location	General Concerns	No. of Comments
Jasper Ave	<ul style="list-style-type: none"> <li>Desire for proper footpaths</li> </ul>	5
Sheepwash Rd (between Taits Rd and Cottesloe Dr)	<ul style="list-style-type: none"> <li>Desire for a well-drained bike-friendly edge</li> <li>Overgrown vegetation/maintenance concerns</li> </ul>	4
Ozone Rd (near Reid St)	<ul style="list-style-type: none"> <li>Footpath uneven</li> </ul>	3

Location	General Concerns	No. of Comments
Bridge Rd*	<ul style="list-style-type: none"> <li>Some portions of the footpaths are unsealed</li> </ul>	3
Thirteenth Beach Rd	<ul style="list-style-type: none"> <li>Limited shoulder for cyclists</li> </ul>	2
Clifford Pde	<ul style="list-style-type: none"> <li>Footpath unsealed</li> </ul>	2
Hitchcock Ave (south of Bridge Rd)	<ul style="list-style-type: none"> <li>Unsealed footpaths</li> </ul>	1
Ewing Blyth Dr	<ul style="list-style-type: none"> <li>Vegetation desired to provide a barrier between the road</li> </ul>	1
Barwon Heads – Ocean Grove Rd	<ul style="list-style-type: none"> <li>Area susceptible to cyclic erosion</li> </ul>	1

\* RRV Arterial Roads and not managed by the City.

#### 5.1.4 Public Transport

Public Transport challenges were the fourth most mentioned category raised by the community. The City received seven responses relating to this challenge category, contributing to only 1.4% of all responses.

Although there were only seven responses, each referenced and referred to one, or many, of the following key main themes:

1. Bus frequency;
2. Integration between existing services;
3. Car dependant transport system;
4. Opportunities to expand use of community bus; and
5. Links desired between BH and surrounding towns/cities.

#### 5.1.5 High Heavy Vehicle Traffic

High Heavy Vehicle Traffic challenges were the least mentioned category raised by the community. The City received only two responses relating to this challenge category, contributing to 0.4% of all responses.

The two responses raised the following concerns:

1. Roads/streets have high truck volumes, resulting in traffic flow concerns;
2. Heavy vehicle traffic and safety concerns for other road users; and
3. Heavy vehicle traffic impact on environment, infrastructure, etc.

## 5.2 Opportunities

The community identified a number of potential solutions, opportunities and suggestions for improvement during the community consultation stage. These are discussed and considered in the development of the Proposed Actions (Section 7 and Implementation Plan (Section 8).

## 6 What the Data Told Us

### 6.1 Traffic Volumes

The City undertook and commissioned a series of speed count traffic surveys over the 2019/2020 summer period. These surveys were taken before, during and after the peak Christmas/New Year period to get a good understanding of the fluctuations in traffic volumes, speeds and number of commercial/heavy vehicles.

The survey dates were as follows:

- Before: 5<sup>th</sup> – 23<sup>rd</sup> December 2019;
- Mid: 23<sup>rd</sup> December 2019 – 5<sup>th</sup> January 2020; and
- After: 3<sup>rd</sup> – 16<sup>th</sup> February 2020.

Detailed survey results are provided at Appendix B.

Figures summarising some of the key results are provided as follows:

- Peak Day Traffic Volumes are provided in Figure 6-1;
- Typical (85<sup>th</sup> percentile) Vehicle Speeds are provided in Figure 6-2; and
- Average percentage of Commercial Vehicles are provided in Figure 6-3.

The survey results supported assumptions that some key routes through the Barwon Heads study area experience significant fluctuations in traffic volumes during peak holiday periods.

Off-peak traffic speed and volume surveys were planned to be collected as part of this project. Due to COVID19 travel restrictions implemented during the majority of 2020 and resulting disruption to typical traffic patterns, the off-peak data collection did not proceed as it was considered traffic patterns would not be representative of typical off-peak travel.

# Peak Daily Traffic Volumes

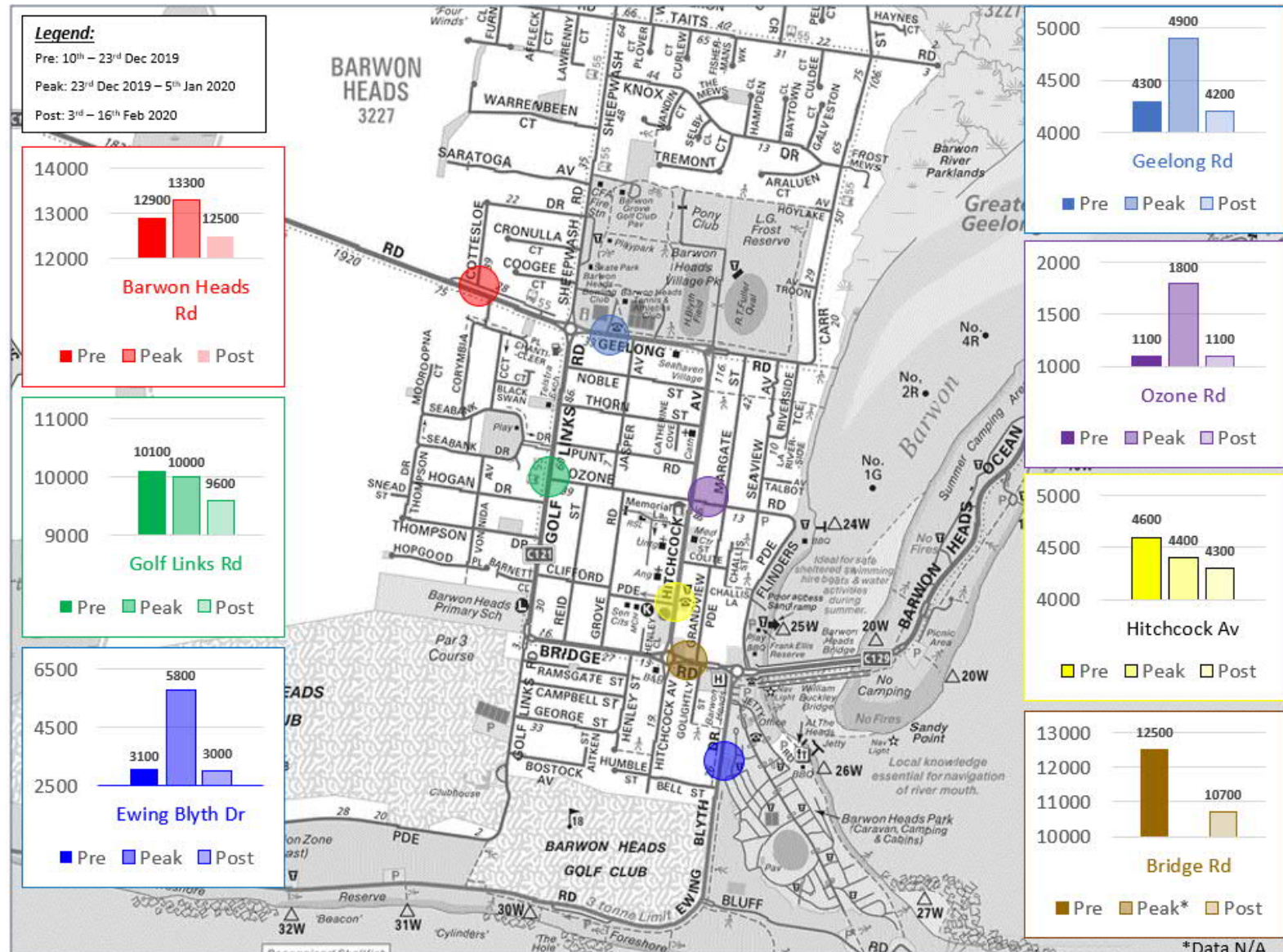


Figure 6-1: Peak Day Traffic Volumes Summary



# Speed of Traffic – 85<sup>th</sup> Percentile

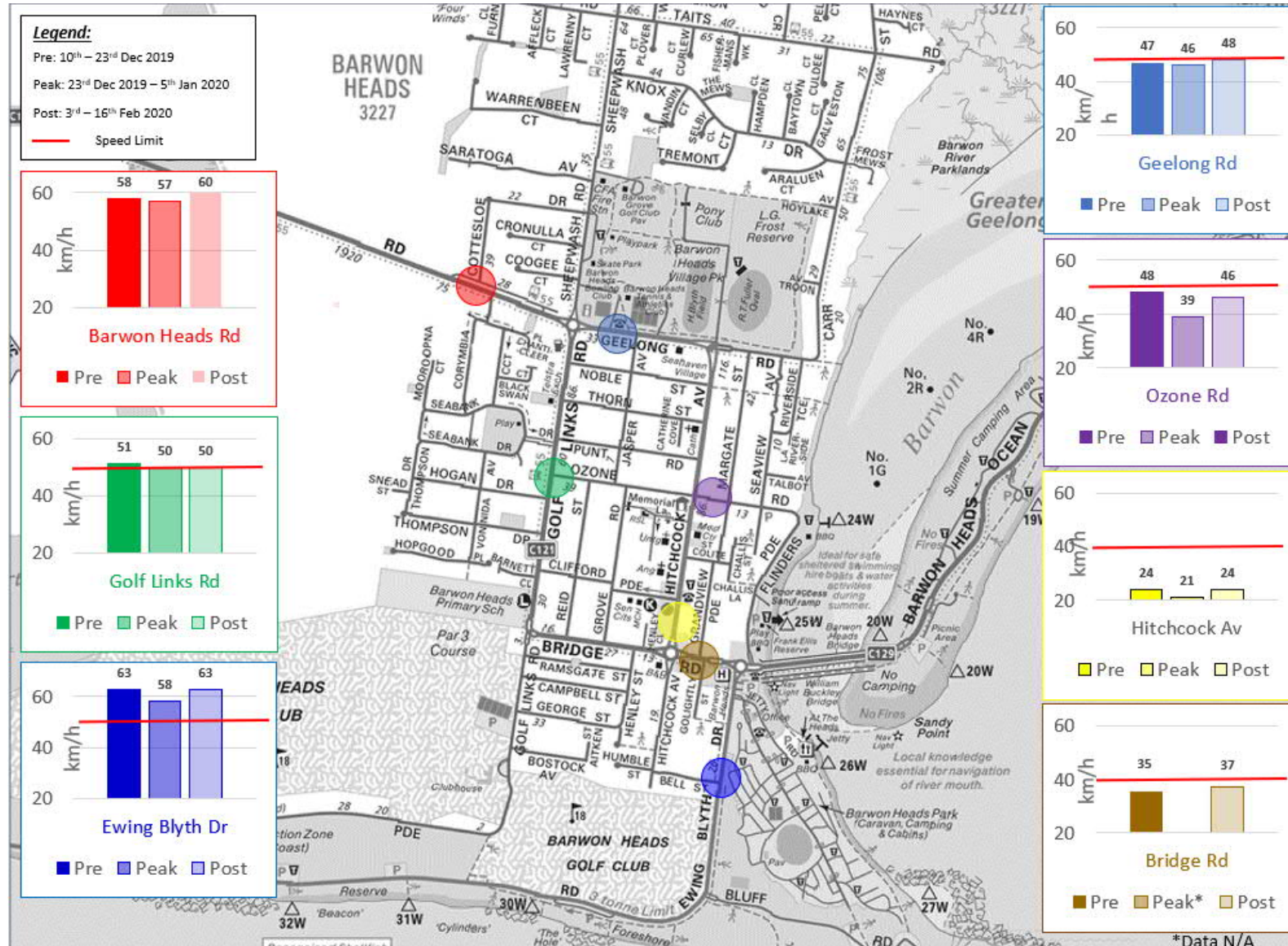


Figure 6-2: Typical (85th Percentile) Vehicle Speeds



# Percentage of Commercial Vehicles

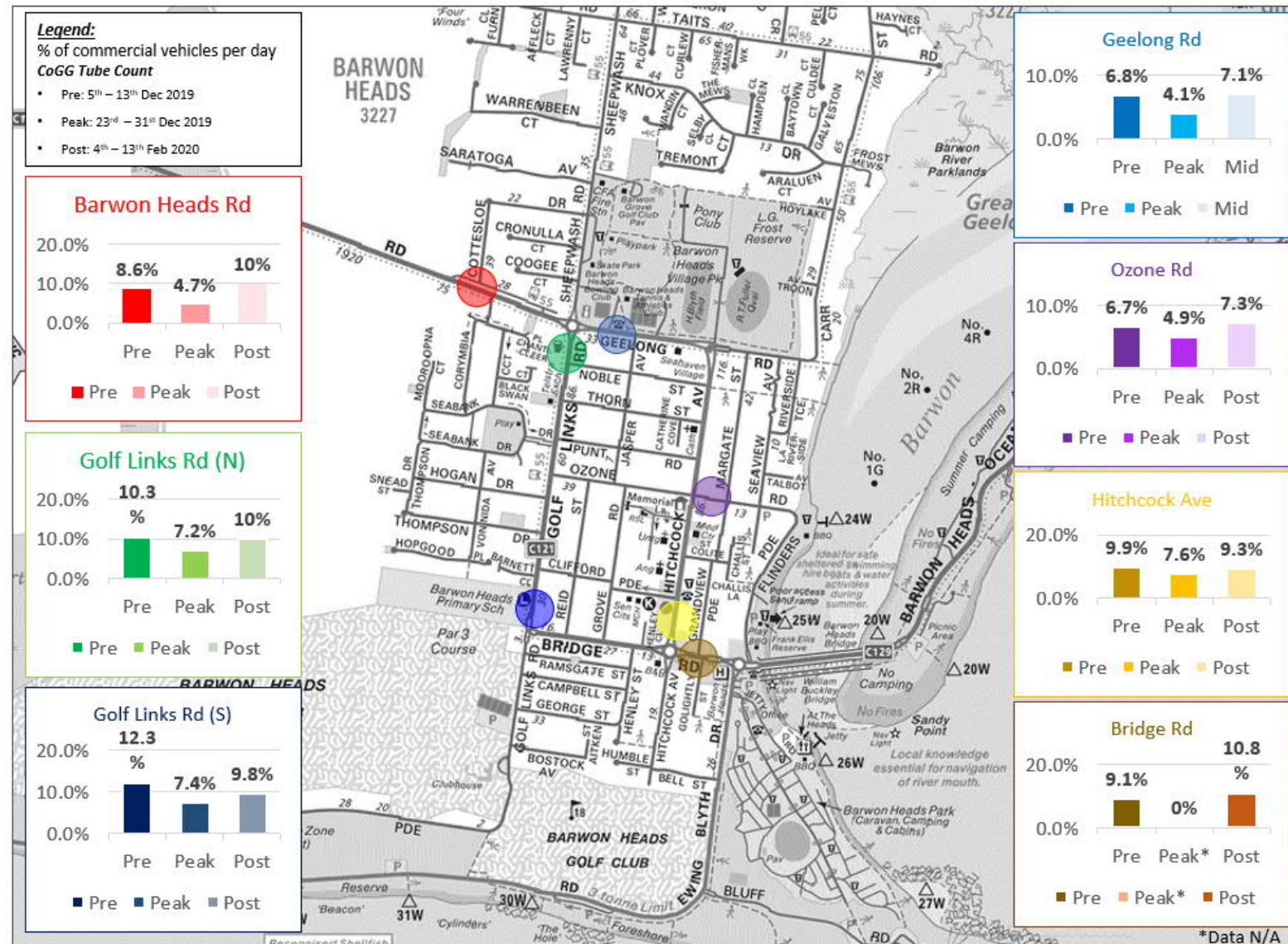


Figure 6-3: Average percentage of Commercial Vehicles per day

## 6.2 Crash Statistics

A crash analysis has been conducted for the Barwon Heads study area. A review of recorded crash data provided by Regional Roads Victoria for the latest 5-year period of data (1<sup>st</sup> January 2015 to 31<sup>st</sup> December 2019) included the following findings:

- There were 15 recorded crashes within the study area;
- There were 2 recorded crashes at the intersection of Geelong Road East and Hitchcock Avenue, both of which were Other Injury “right through” type crashes during dry daytime conditions, where a vehicle turning right into Hitchcock Road west to south collided with a westbound Geelong Road vehicle;
- The Fatality and Serious Injury (FSI) crash ratio for the project area was 0.27 (4 crashes), these included:
  - A Serious Injury crash on Barwon Heads Road 58m west of Geelong Road involving a motorcyclist; and
  - At Serious Injury crash at the intersection of Barwon Heads Road/Golf Links Road/Geelong Road involving a cyclist.
- Vulnerable road users, including pedestrians, cyclists, motorcyclists and motor scooters, were involved in 66% of the crashes (10 crashes), including:
  - 3 crashes involving pedestrians;
  - 5 crashes involving cyclists; and
  - 1 crash involving a motor scooter and 1 crash involving a motorcyclist.

The crash data has been summarised in Table 6-1. A detailed map showing the crash statistics in the area are located in Appendix C.

Table 6-1: 5-year crash summary for project zone

Year	Fatal	Serious Injury	Other Injury	Total Crashes
2015			4	4
2016		1	2	3
2017	1	1	2	4
2018		1	2	3
2019			1	1
Total (5 Years)	1	3	11	15

## 6.3 Car Parking Data

### 6.3.1 Supply

The City engaged a data collection company, AusTraffic, to undertake a parking inventory of key on-street and off-street parking areas within the commercial, river front and ocean front areas of Barwon Heads. The on-street parking spaces surveyed included all streets located within close proximity to the foreshore and commercial precinct, including:

- Ewing Blyth Drive;
- Bridge Road;
- Golf Links Road;
- Hitchcock Avenue;
- Clifford Parade;
- Grove Road;
- Ozone Road;
- Flinders Parade; and
- Jetty Road.

The off-street car parks included:

- Frank Ellis Reserve (Flinders Parade indented off-street parking spaces);

- Bridge Car Park (access off Ewing Blyth Drive);
- Jetty Road off-street car park;
- Barwon Heads Hotel off-street car park; and
- The Spit off-street car park.

Overall, these areas include a total of 739 car parking spaces. Parking spaces within Barwon Heads are largely unrestricted, with no time limits applying. Exceptions to this are some short-term parking restrictions along the main activity strip of Hitchcock Avenue, as well as some localised short-term restrictions adjacent to businesses in locations such as Bridge Road and Flinders Parade.

### 6.3.2 Demand

Car parking demand surveys were undertaken at hourly intervals from 7am to 6pm on the following days:

- Wednesday 22<sup>nd</sup> January 2020 (school holiday period);
- Saturday 25<sup>th</sup> January 2020 (school holiday period and Australia Day weekend);
- Wednesday 19<sup>th</sup> February 2020 (non-holiday period); and
- Saturday 22<sup>nd</sup> February 2020 (non-holiday period).

The surveys found peak and average parking demands for the overall surveyed area as per Table 6-2. Figure 6-4 provides an overview of the absolute peak demand for each survey section. It is important to note that observed peaks for each section may not coincide. The purpose of Figure 6-4 is to illustrate where the demand for parking is concentrated. The overall area demand is provided in Table 6-2.

Table 6-2: Summary of Parking Demands on Surveyed Days

Survey Period	Peak Demand	Average Demand
Wednesday 22 <sup>nd</sup> January 2020*	68% (472 spaces)	47% (330 spaces)
Saturday 25 <sup>th</sup> January 2020*	83% (577 spaces)	67% (465 spaces)
Wednesday 19 <sup>th</sup> February 2020	49% (365 spaces)	38% (280 spaces)
Saturday 22 <sup>nd</sup> February 2020	66% (489 spaces)	47% (345 spaces)

\*NB: parking demand for The Spit parking area was not collected for the two January dates.



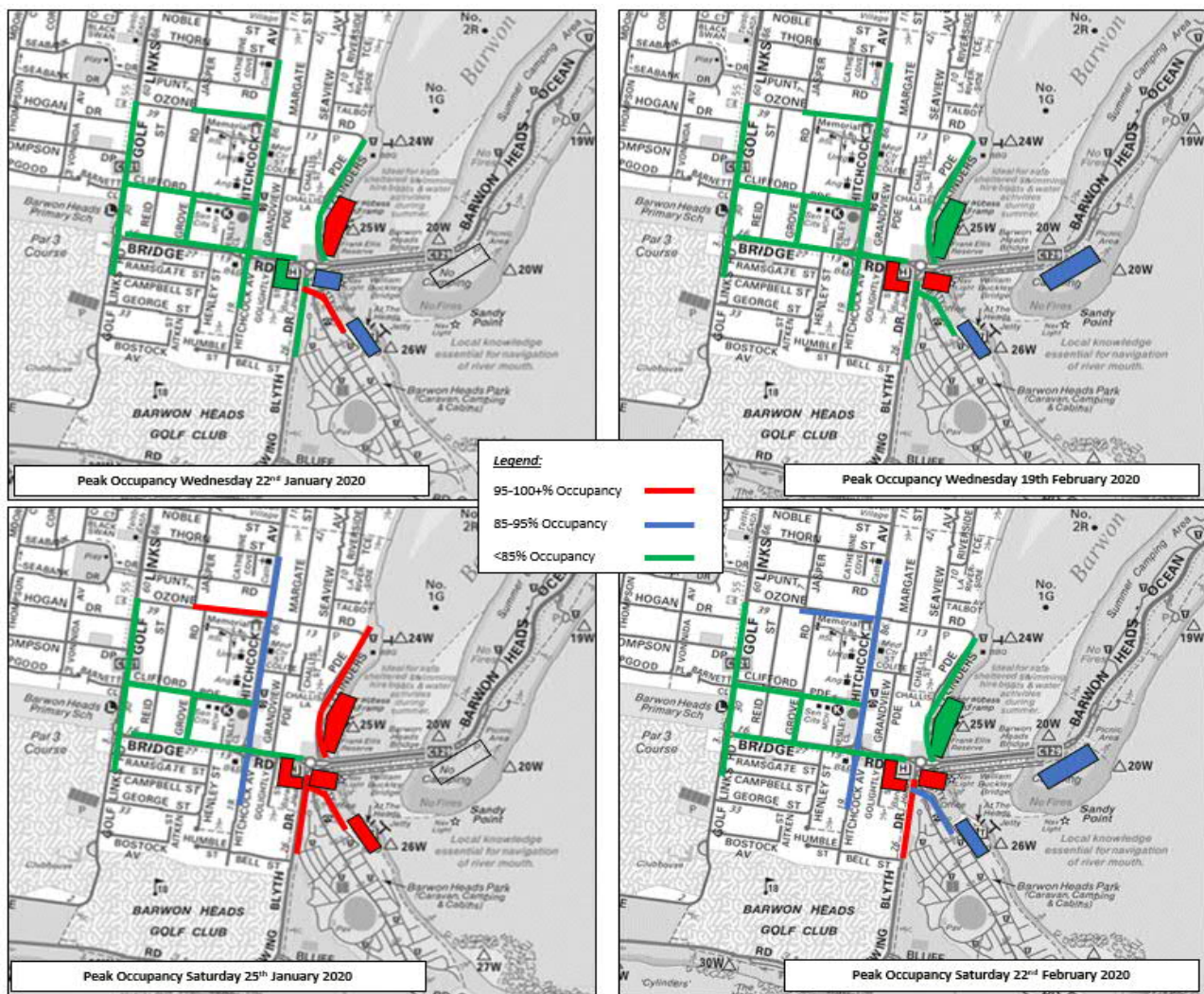


Figure 6-4: Car Parking Occupancy

Figure 6-5 shows the profile of surveyed parking demands for each of the survey days. As can be seen, parking demands across the day on Saturday 25<sup>th</sup> January were significantly higher than on the other surveyed days, with occupancy reaching above 80% from 11am through to after 2pm. This Saturday was on the last weekend of the Victorian school holiday period and was at the end of the peak summer holiday period. The peak occupancy experienced on any other surveyed day was 68% at 1pm on Wednesday, 22<sup>nd</sup> January 2020.

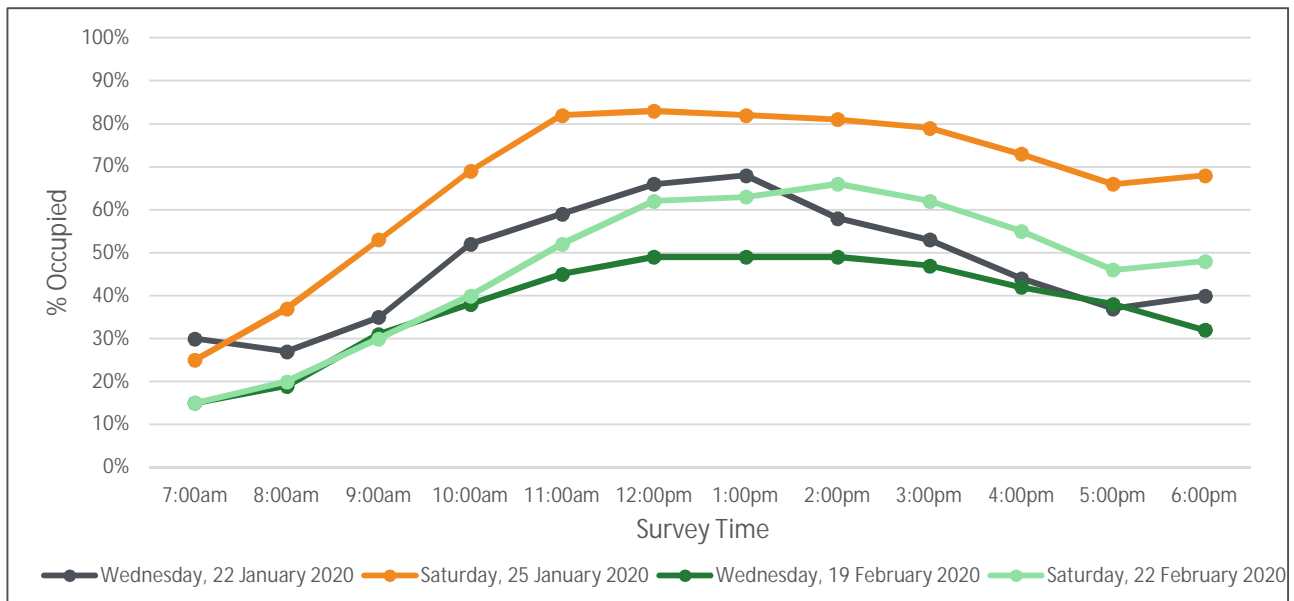


Figure 6-5: Barwon Heads Parking Surveys – Parking Occupancy Profile

At the peak surveyed time of 12noon on Saturday, 25<sup>th</sup> January 2020 (Australia Day weekend), parking demands and opportunities across the surveyed area were as summarised in Table 6-3.

Table 6-3: Summary of Parking Demands and Opportunities at 12noon, Saturday 25 January 2020

ID	Location	Parking Supply	Parking Demand	Occupancy %	No. of Spaces Available
A	Ewing Blyth Drive	2	2	100%	0
B	Bridge Road	72	44	61%	28
C	Golf Links Road	75	19	25%	56
D	Hitchcock Avenue	127	120	94%	7
E	Clifford Parade	52	32	62%	20
F	Grove Road	21	15	71%	6
G	Ozone Road	29	26	90%	3
H	Flinders Parade	64	66	103%	-2
I	Jetty Road	44	47	107%	-3
J	Frank Ellis Reserve (Flinders Parade indented Off-street Car Parking Spaces)	65	65	100%	0
K	Bridge Car Park (off Ewing Blyth Drive)	38	36	95%	2
L	Jetty Road Off-street Car Park	25	23	92%	2
M	Barwon Heads Hotel Off-street Car Park	85	82	96%	3
	Total Study Area	699	577	83%	122

As can be seen from the parking survey results, the highest parking demands were experienced as expected in the foreshore areas and along and near the commercial strip of Hitchcock Avenue. Some locations, such as along Jetty Road and Flinders Parade, experienced parking demands in excess of the parking supply, indicating a level of cars being parking in non-designated areas or possibly illegally.

The main opportunities for parking were located further away from these key parking generators, in locations such as the west end of Bridge Road, along Clifford Parade and Golf Links Road.



## 7 Proposed Actions

Proposed actions for the Barwon Heads area were established based on the above-discussed community engagement (i.e. Stage 1 Engagement) and traffic and parking study findings.

For the City-managed roads, a series of treatments were developed and presented on the City website for 'Stage 2 Engagement', allowing further community feedback on specific proposed treatments. The 'preferred' treatments aim to address high-priority issues as indicated by the community and traffic/crash data. Proposed treatments and their respective community feedback received are summarised in this section. The proposed treatments are provided at Appendix D with the list of detailed Stage 2 feedback outcomes provided at Appendix E

Many community requests were either broad and/or more appropriately addressed via further strategic review/planning as opposed to an immediate targeted action, these are further outlined below in Section 7.3. A range of strategic items are discussed below where such requests will receive further consideration.

For issues related to RRV-managed arterial roads, the City consulted with RRV. RRV responses are provided accordingly below with some actions to be undertaken as part of the City Strategic Items.

### 7.1 Proposed Treatments

Appendix D provides full details of the City proposals presented on the City's website for Stage 2 Engagement. The treatments are summarised as follows:

1. Sheepwash Road – pedestrian refuge island (at Saratoga Avenue). This pedestrian refuge provides a safer crossing location at a popular existing crossing point, would have calming effects on traffic along Sheepwash Road, and would form part of the Safe Travel to School Routes.
2. Sheepwash Road – pedestrian refuge island (at Coogee Court). This pedestrian refuge provides a safer crossing location near the skate park, would have calming effects on traffic along Sheepwash Road, and would form part of the Safe Travel to School Routes.
3. Geelong Road / Hitchcock Avenue – intersection improvements. Improved delineation will calm traffic at this location, discourage use of local roads as shortcuts, and indicate the functional operation of this modified T-intersection more clearly.
4. Hitchcock Avenue / Ozone Road – intersection improvements. Improved delineation and conspicuity of the intersection via raised treatments and support traffic control device upgrades will improve visibility/awareness and reduce vehicle speed on approach and through the intersection reducing crash risks for all road users.
5. Ozone Road – raised platform intersections at Seaview Avenue and Margate Street. The vertical deflection devices reduce vehicle speeds, deter rat running/through movements and improve safety for all road users accordingly.
6. Bridge Road / Golf Links Road – provision of new footpath. Improves pedestrian safety by completing the missing network link along the north side of Bridge Road.
7. Seaview Avenue – chicane treatment/s for traffic calming. The calming device/s deter rat running behaviour and calm traffic to reduce crash risks along the local street.
8. Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction. The proposal improves safety for cyclists, improves conditions for active transport along and across the Thirteenth Beach corridor, and lowers operating speeds improving safety outcomes for all road users.
9. Barwon Heads area – active transport path improvements. The proposal would expand the active transport network providing safe walking and cycling connections between the Barwon Heads township, Thirteenth Beach and Lake Connewarre.
10. Tait's Road – cycle improvements. Stencil pavement markings in the traffic lanes would raise awareness for cyclists and encourage safe sharing of the roadway between motorists and cyclists.
11. Golf Links Road – footpath and cycle improvements. Stencil pavement markings in the traffic lanes would raise awareness for cyclists and encourage safe sharing of the roadway between motorists and cyclists.
12. Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements. Provision of improved cycling and pedestrian facilities by upgrades/expansion of the Principal Bicycle Network (PBN) will improve active travel outcomes for the northern parts of the Barwon Heads township.
13. Clifford Parade – footpath provision. Provides missing footpath connection between Golf Links Road and Grove Road improving safety for pedestrians.

14. Carr Street – drainage upgrades, footpath provision and width for bike lanes/safe passing width. Addresses noted drainage issues and improves conditions for vulnerable road users.
15. Thirteenth Beach Road – provision of gravel path. A formal path along the north side of Thirteenth Beach Road between the major beach access carpark and the Surf Life Saving Club, would improve safety for vulnerable road users in this high pedestrian activity zone. It would improve active transport connectivity to the township provided via Stephens Parade.
16. Safe Travel to School Routes – road stencilling. Stencil pavement markings raise awareness for school children/vulnerable road users and improves safe route wayfinding.
17. Von Nida Avenue – provision of new footpath. Improves pedestrian safety by completing the missing network link along the eastern side of Von Nida Avenue between Seabank Drive and Hopgood Place.
18. Barwon Heads Road Service Road – conversion to one way. Improved linemarking and conversion to one-way travel to reduce crash risks, particularly for right turns out of the service road.
19. Hitchcock Avenue – bicycle parking. One existing car parking space (exact location to be confirmed) would be converted to provide parking for bicycles.

High level concept plans representing the above treatments are attached as Appendix D. These sketches were used to convey the proposals to the community to allow feedback to be provided via the City website. Outcomes are summarised in the following section.

## 7.2 Community Feedback

The community was invited to provide feedback on the above proposals via the “Have Your Say” portal on the City’s website. 169 members of the community fully or partially completed the online survey. Participants selected the specific treatments which they would provide feedback on. Between 10 and 56 responses were received for each treatment. For each proposed treatment, participants were asked:

- Do you support the proposal? and
- Tell us what you think about the proposal.

The feedback is summarised below.

1. Sheepwash Road – pedestrian refuge island (at Saratoga Avenue)

A strong level of support was received for the proposal as shown in the figure below. On further analysis of detailed feedback, provision of a safe pedestrian crossing point is strongly supported, however there is concern over the location and design of the proposed refuge location with respect to the Barwon Heads CFA Fire Station.

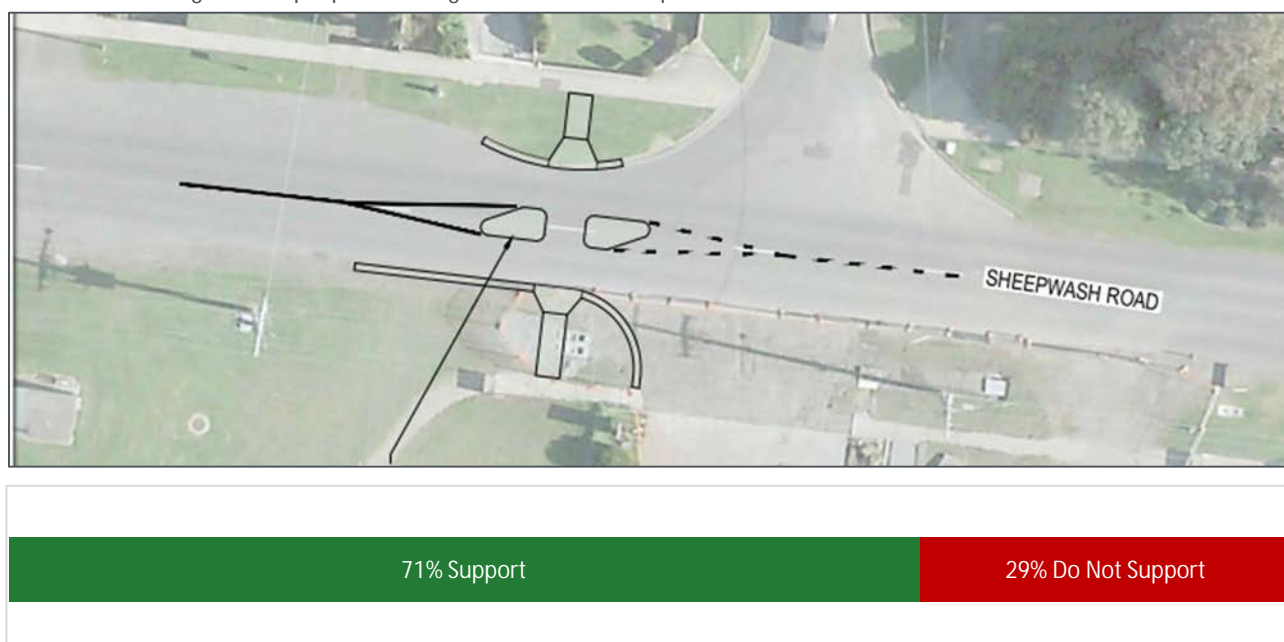


Figure 7-1: Support for pedestrian refuge island on Sheepwash Road at Saratoga Avenue (total 31 responses)

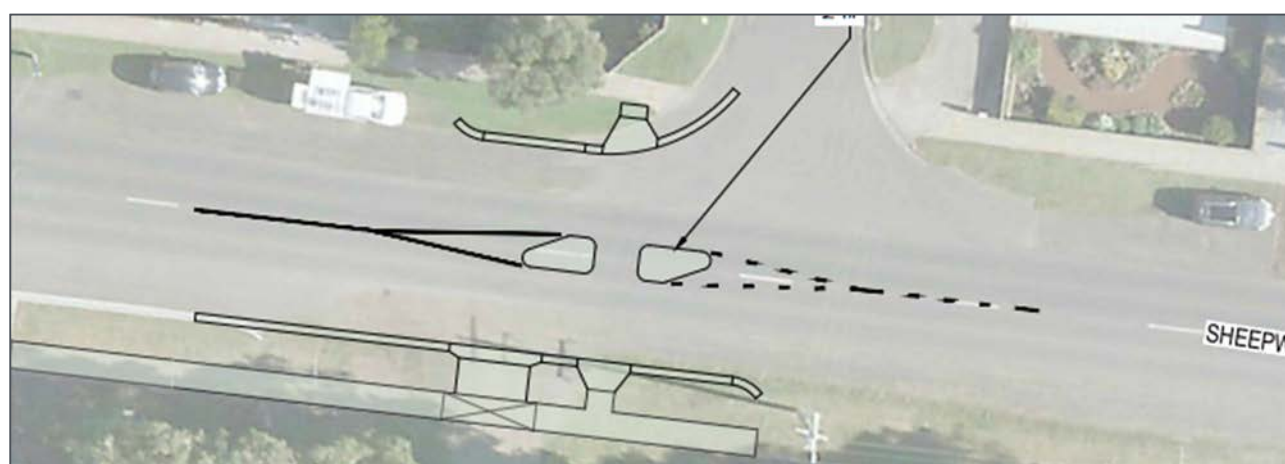
Table 7-1: Expanded feedback regarding pedestrian refuge island on Sheepwash Road at Saratoga Avenue

Key Feedback Items based on Expanded Responses	No. of Comments
• Community members left feedback supporting the proposal	11
• Concern around location of crossing (proximity to CFA Fire Station)	8
• Suggestions for increased control/pedestrian priority (e.g. Pedestrian Operated Signals)	5

Considering the level of support for this treatment, it is clear the concept is desired by the community, however the location and design details should be reviewed to provide appropriate outcomes for both pedestrians and CFA access and operations. The alternative location proposed at Coogee Court (see next treatment) would avoid the issues regarding location.

## 2. Sheepwash Road – pedestrian refuge island (at Coogee Court)

A strong level of support was received for the proposal as shown in the figure below. On further analysis of detailed feedback, the proposal is generally supported. Some comments suggest crossing locations at Saratoga Avenue and the roundabout are more critical in servicing pedestrian desire lines.



78% Support

22% Do Not Support

Figure 7-2: Support for pedestrian refuge island on Sheepwash Road at Coogee Court (total 23 responses)

Table 7-2: Expanded feedback regarding pedestrian refuge island on Sheepwash Road at Coogee Court

Key Feedback Items based on Expanded Responses	No. of Comments
• Community members left feedback supporting the proposal	6
• Suggestions for increased control/pedestrian priority (e.g. Pedestrian Operated Signals)	3
• Suggestions that not needed/recommended due to proximity to roundabout/crossing	2

The concept is generally supported and recommended for implementation however the location and design details should be reviewed in association with the above proposal (i.e. the pedestrian refuge at Saratoga Avenue).

## 3. Geelong Road / Hitchcock Avenue – intersection improvements

A strong level of support was received for the proposal as shown in the figure below. On further analysis of detailed feedback, the concept is generally supported, however several comments note the need to further consider active travel, access to Village Park and an emphasis on clearly defined priority in the final design.



83% Support

17% Do Not Support

Figure 7-3: Support for intersection improvements and Geelong Road / Hitchcock Avenue (total 24 responses)

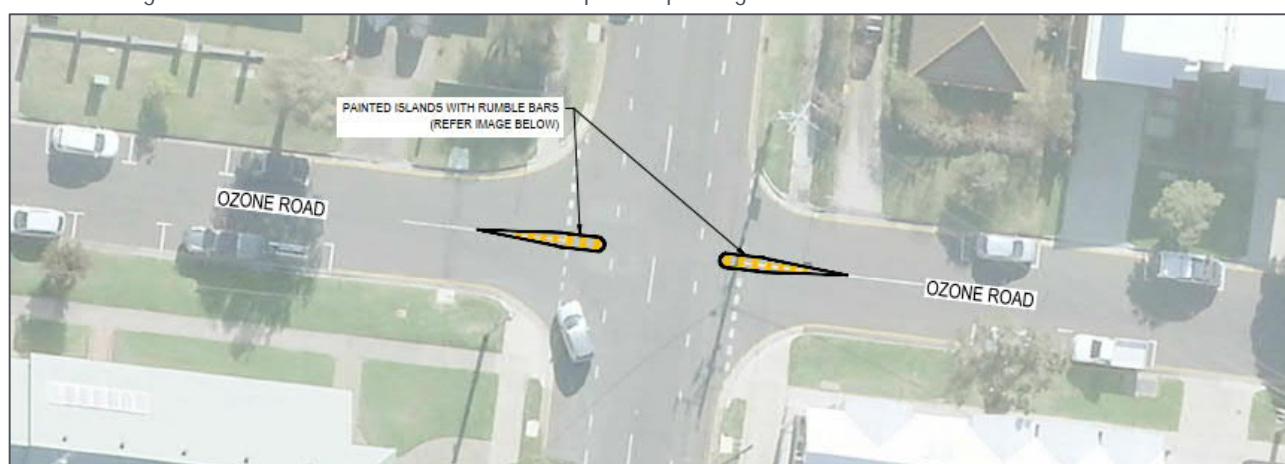
Table 7-3: Expanded feedback regarding intersection improvements at Geelong Road / Hitchcock Avenue

Key Feedback Items based on Expanded Responses	No. of Comments
• Community members left feedback supporting the proposal	9
• Community members left feedback about current confusion/danger at existing intersection	9
• Noted to further consider access to Village Park	4
• Noted to ensure pedestrians and cyclists considered	3
• Preference for a roundabout	2
• Recommendation for second river crossing	2

The concept is generally supported and recommended for implementation, with further consideration to the abovementioned responses regarding active travel, Village Park access and intersection clarity/conspicuity.

#### 4. Hitchcock Avenue / Ozone Road – intersection improvements.

A strong level of support was received for the proposal as shown in the figure below. The community has indicated that the design should be considered further with respect to parking conditions and vulnerable road users.





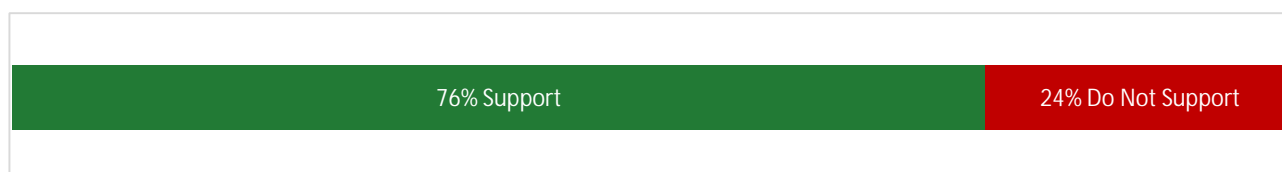


Figure 7-4: Support for intersection improvements and Hitchcock Avenue / Ozone Road (total 29 responses)

Table 7-4: Expanded feedback regarding intersection improvements at Hitchcock Avenue / Ozone Road

Key Feedback Items based on Expanded Responses	No. of Comments
• Concerns regarding parking conditions in the vicinity of the intersections	7
• Concerns expressed for pedestrians and cyclists	4
• Preference for roundabout noted	3
• Community members left feedback supporting the proposal	3
• Noted U-turn behaviour for motorists searching for parking	2

#### 5. Ozone Road – raised platform intersections at Seaview Avenue and Margate Street

A very strong level of support was received for the proposal as shown in the figure below. Limited consistency was observed in expanded feedback from the community, however comments generally support the proposal and/or reiterate the need for calming along Ozone Road. Several suggestions regarding potential associated works /considerations and the impacts of these treatments on adjacent routes should factor into subsequent design and planning considerations.

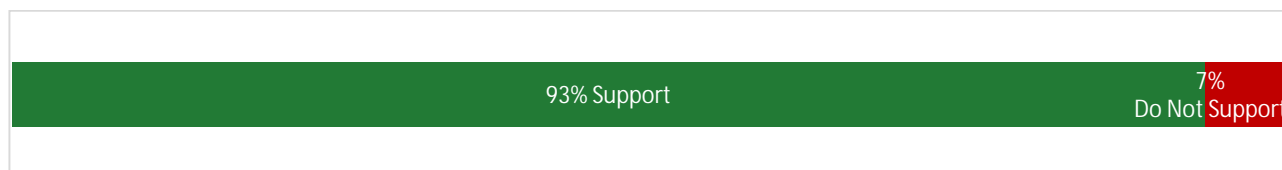


Figure 7-5: Support for raised platform intersections along Ozone Road (total 28 responses)

#### 6. Bridge Road / Golf Links Road – provision of new footpath

A very strong level of support was received for the proposal as shown in the figure below. While some expanded feedback discussed broader issues around the township, all comments focussed on this particular treatment endorsed the proposal.





97% Support

3%  
Do Not Support

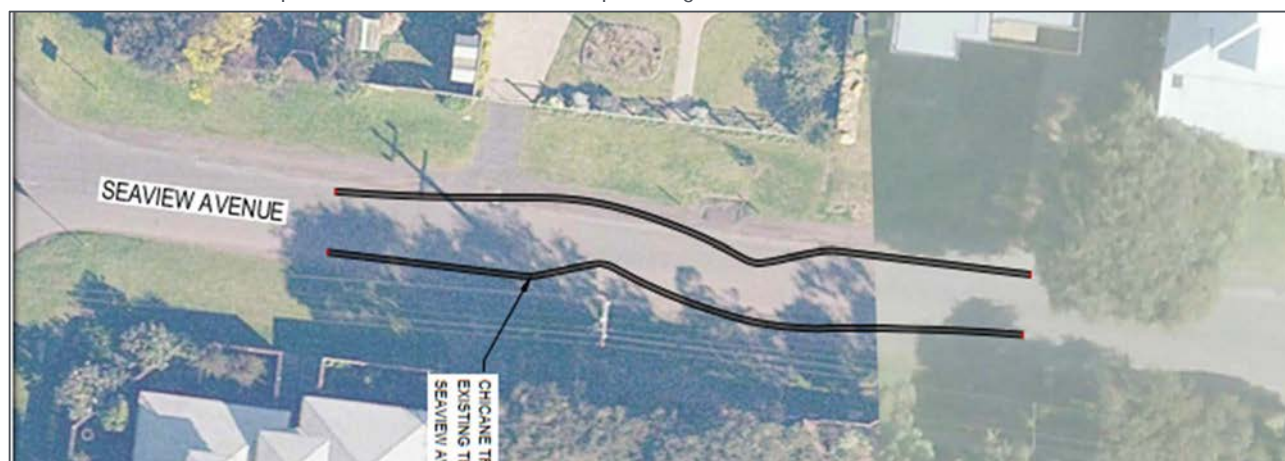
Figure 7-6: Support for new footpath along Bridge Road and Golf Links Road (total 29 responses)

Table 7-5: Expanded feedback regarding a new footpath along Bridge Road and Golf Links Road

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback supporting the proposal</li> </ul>	14
<ul style="list-style-type: none"> <li>Request for this footpath plus additional footpath improvements               <ul style="list-style-type: none"> <li>— Pedestrian fencing at the bend</li> <li>— Wider path</li> </ul> </li> </ul>	2

#### 7. Seaview Avenue – chicane treatment/s for traffic calming

This proposal had less feedback and a lower percentage of support compared to other treatments. The expanded feedback suggests the proposal is generally supported or not opposed (but perhaps not prioritised). Additional broader ideas have been provided for consideration in planning.



67% Support

33% Do Not Support

Figure 7-7: Support for chicane treatments along Seaview Avenue (total 15 responses)

Table 7-6: Expanded feedback regarding chicane treatments along Seaview Avenue

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback supporting the proposal</li> </ul>	5
<ul style="list-style-type: none"> <li>Feedback suggesting not necessary/high priority</li> </ul>	4

#### 8. Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction

A strong level of support was received for the proposal as shown in the figure below. A significant number of comments were provided, mostly in support of the concept, noting the need for improvements and a reduced speed limit, and highlighting the cycling popularity and associated opportunities by improving conditions. A limited number of additional and/or alternative requests were provided which are to be considered in concept development.

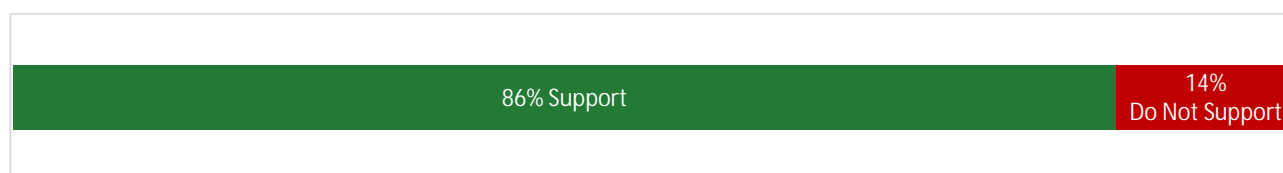


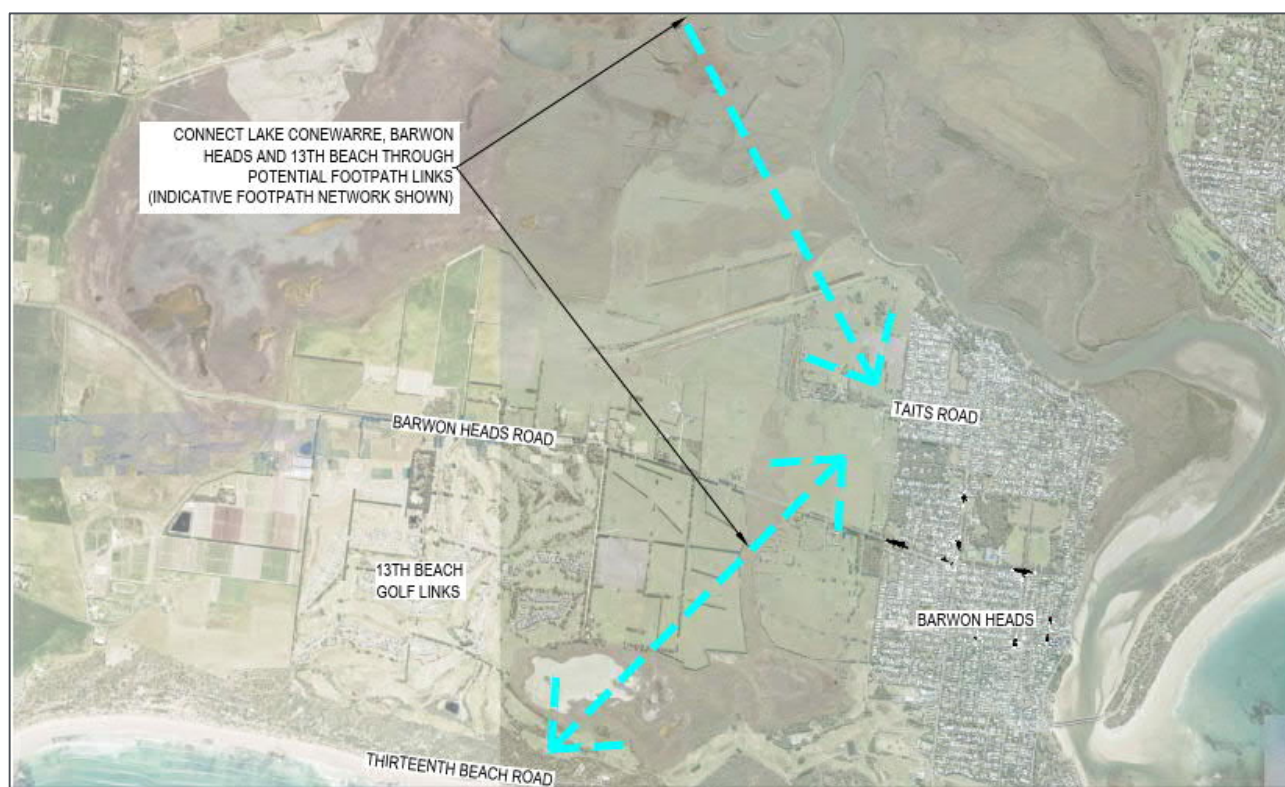
Figure 7-8: Support for Thirteenth Beach Road proposal (total 43 responses)

Table 7-7: Expanded feedback regarding cycle and pedestrian improvements along Thirteenth Beach Road

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback supporting the proposal</li> </ul>	22
<ul style="list-style-type: none"> <li>Community members left indicating a desire for a reduced speed limit</li> </ul>	6
<ul style="list-style-type: none"> <li>Further pedestrian improvements requested               <ul style="list-style-type: none"> <li>Additional paths</li> <li>Additional crossings</li> </ul> </li> </ul>	6
<ul style="list-style-type: none"> <li>Further cyclist separation requested</li> </ul>	2

#### 9. Barwon Heads area – active transport path improvements

This proposal attracted full support from respondents. The strong support was echoed in the expanded feedback where enthusiasm for the concept was expressed. A number of respondents were in support on condition of environmentally sensitive design. Further suggestions were also provided for consideration in subsequent planning for these shared path connections.



100% Support

Figure 7-9: Support for active transport improvements around the Barwon Heads area (total 33 responses)

Table 7-8: Expanded feedback regarding active transport improvements around the Barwon Heads area

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback supporting the proposal</li> </ul>	24
<ul style="list-style-type: none"> <li>Comments requesting appropriate environmental consideration</li> </ul>	3

#### 10. Taits Road – cycle improvements

This proposal received limited feedback compared to other treatments, however the majority of respondents were in support of the treatment. Expanded feedback was in support however there were some comments suggesting this treatment does not go far enough to treat the identified safety concerns, but is reasonable ‘step towards’ treatment that may be effective, particularly if this treatment is adopted more consistently throughout the Barwon Heads area.





Figure 7-10: Support for proposed bicycle stencils on Taits Road (total 14 responses)

#### 11. Golf Links Road – footpath and cycle improvements

A very strong level of support was received for the proposal as shown in the figure below. Further feedback was generally supportive with emphasis on school safety.



Figure 7-11: Support for Golf Links Road footpath and cycle improvements (total 33 responses)

#### 12. Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements

A strong level of support was received for the proposal as shown in the figure below. Thoughts provided in expanded responses were generally supportive with additional ideas/opportunities raised for consideration in further development of the concept.



91% Support

9%  
Do Not Support

Figure 7-12: Support for footpath and cycle improvements on Sheepwash Road, Carr Street and River Parade (total 23 responses)

Table 7-9: Expanded feedback regarding Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Include footpaths for nominated roads</li> </ul>	4
<ul style="list-style-type: none"> <li>Create a space for cyclists (on road or off-road path)</li> </ul>	3

### 13. Clifford Parade – footpath provision

A majority level of support was received for the proposal as shown in the figure below. Expanded feedback was limited. Responses supported the proposal and raised other traffic concerns for consideration in concept development.



83% Support

17% Do Not Support





32 responses were received. Key findings are summarised in Table 7-10.

Table 7-10: Expanded feedback regarding cycle and pedestrian improvements along Thirteenth Beach Road

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback strongly supporting the described for concept</li> </ul>	30
<ul style="list-style-type: none"> <li>Request for further separated path provision along Thirteenth Beach Road</li> </ul>	6

The was consistent support for this treatment observed in the community responses. A number of responses indicated a desire for separated path connections beyond the current extents proposed.

#### 16. Safe Travel to School Routes – road stencilling

The figure below indicates very strong support for the proposal. While the expanded responses were generally in support of the concept, several provided requests for supporting treatments and treatments for issues outside of the designated walk to school route.

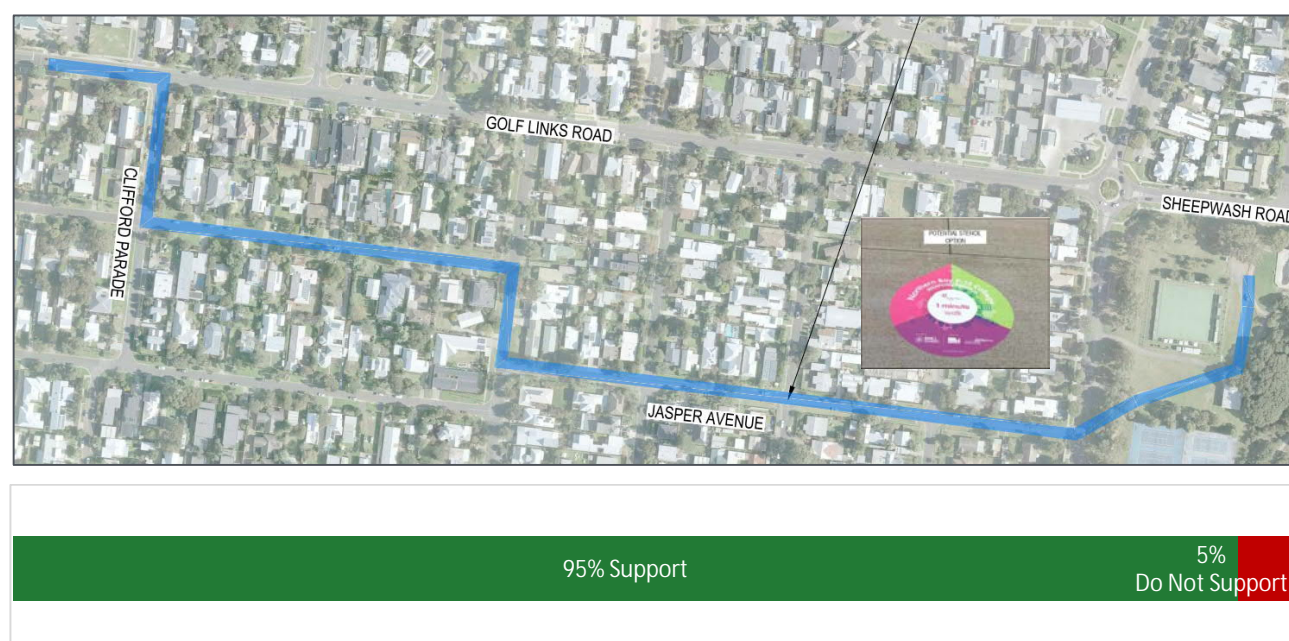


Figure 7-16: Support for Safe Route to School stencilling (total 22 responses)

Table 7-11: Expanded feedback regarding Safe Route to School stencilling

Key Feedback Items based on Expanded Responses	No. of Comments
<ul style="list-style-type: none"> <li>Community members left feedback supporting the proposal</li> </ul>	16
<ul style="list-style-type: none"> <li>Broader issues/supporting treatments raised for consideration               <ul style="list-style-type: none"> <li>Footpaths/cycle path</li> <li>Road furniture maintenance</li> <li>Reduced speed limits/shared zone</li> </ul> </li> </ul>	10

#### 17. Von Nida Avenue – provision of new footpath

This proposal attracted limited feedback. The figure below demonstrates support based on the 10 responses received. There was limited consistency in expanded responses, with a range of thoughts provided to be considered in subsequent planning.

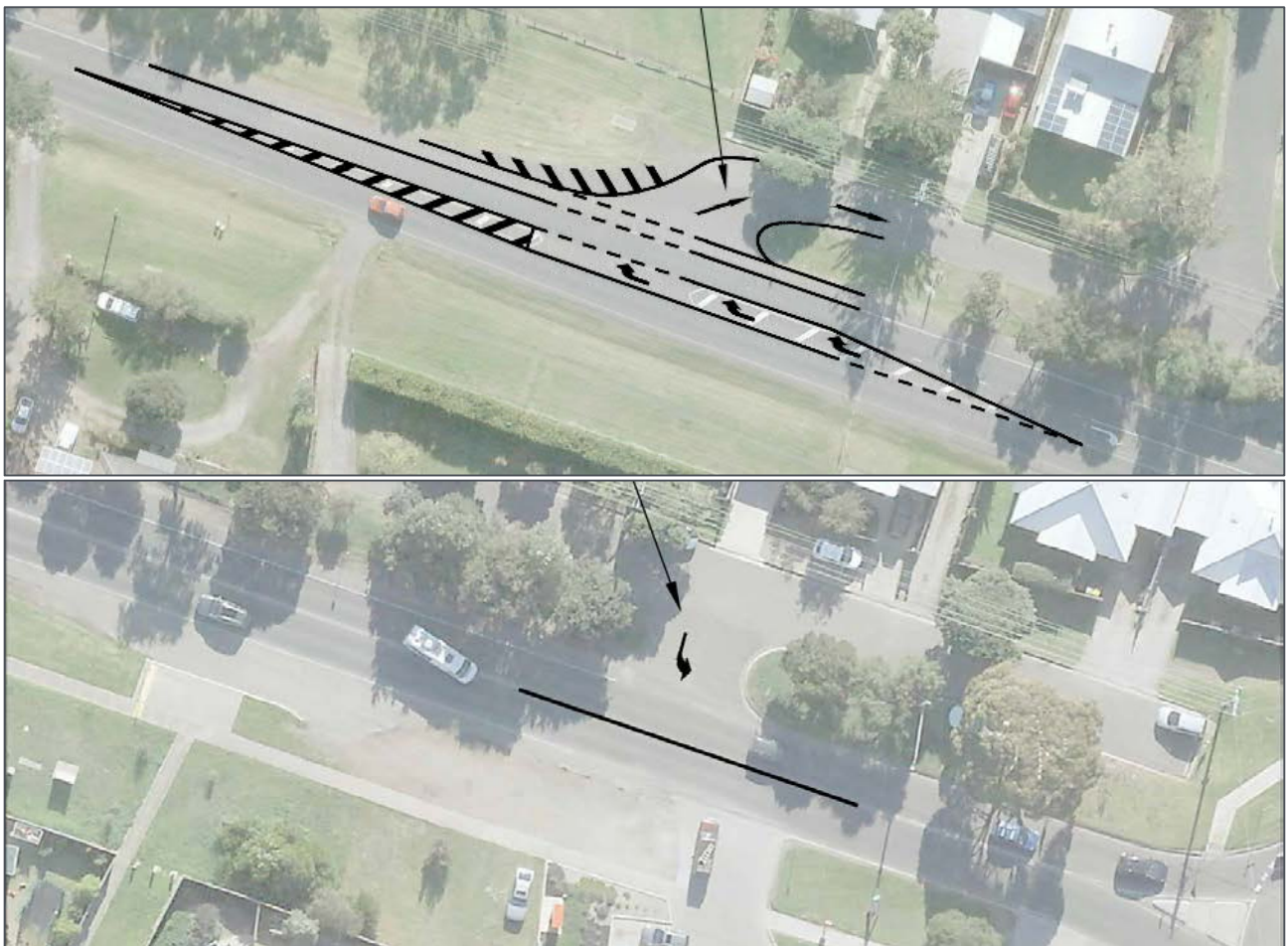




Figure 7-17: Support for new footpath along Von Nida Avenue (total 10 responses)

#### 18. Barwon Heads Road Service Road – conversion to one way

This proposal attracted limited feedback. The figure below demonstrates support based on the 10 responses received. Comments were generally in support of the proposal, while several provided supporting design ideas for consideration in design development.



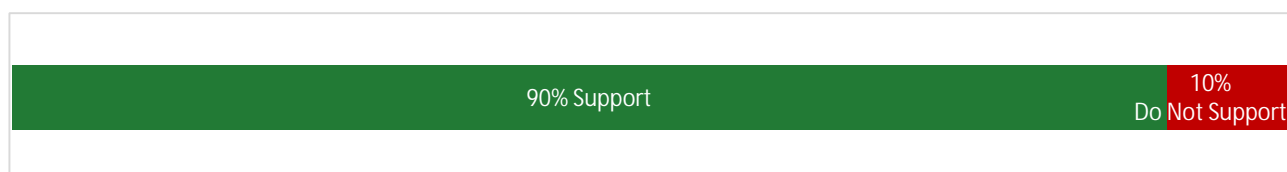


Figure 7-18: Support for one way operation of Barwon Heads Road Service Road (total 10 responses)

### 19. Hitchcock Avenue – bicycle parking

The figure below indicates very strong support for the proposal. The majority of additional comments provided by the community echoed the above results and discussed the potential benefits of such treatments, and potentially additional bicycle parking options.

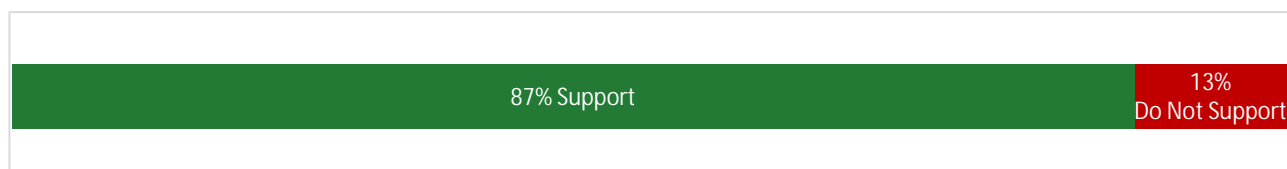


Figure 7-19: Support for bicycle parking in Hitchcock Avenue (total 24 responses)

Table 7-12: Expanded feedback regarding Safe Route to School stencilling

Key Feedback Items based on Expanded Responses	No. of Comments
• Community members left feedback supporting the proposal	10
• Requests for more bicycle parking at additional locations <ul style="list-style-type: none"> <li>– Coffetti/Sunbaker (#49 Hitchcock Av)</li> <li>– River Park</li> <li>– Bridge Road</li> </ul>	3
• Concern expressed regarding loss of car parking space/s	2

## 7.3 Strategic Items

Larger and broader issues identified in this study are explored as 'Strategic Items' to determine further actions for inclusion in the transport plan. The following Strategic Items are discussed in this section:

- Principal Bicycle Network (PBN)
- Safe Route to School (SRTS) Network
- Pedestrian Path Network

- Parking Management
- Planning Assessments/Parking Waivers
- Major Projects
- Public Transport Provision
- Speed Zoning

### 7.3.1 Principal Bicycle Network

The Principal Bicycle Network (PBN) is a network of existing and proposed cycle routes identified to enable key destinations and attractions such as services, education, retail and employment precincts, to be accessed safely by bicycle. It is intended that roads and paths forming part of the identified PBN provide appropriate conditions for cycling. Cycling facilities on nominated PBN routes should be designed for cyclists of varying ability, confidence and age, to encourage increased participation and achieve the associated health and environmental benefits.

Participation in cycling is observed to be relatively high in Barwon Heads where characteristics of the township and its surrounds generate favourable and attractive cycling conditions. The community feedback received in this study indicates an enthusiasm for cycling around the area, with members of the community clearly appreciating the benefits of cycling for local trips, recreation, associated tourism opportunities, etc. Barwon Heads is therefore well placed to continue to promote active travel through improved cycling infrastructure.

The existing PBN in the vicinity of Barwon Heads is shown in Figure 7-20. It consists of the main roads in and out of Barwon Heads (i.e. Barwon Heads Road, Ewing Blyth Road/Thirteenth Beach Road and Barwon Heads-Ocean Grove Road) and a rectangular route around the town centre formed by Bridge Road, Golf Links Road, Geelong Road and Hitchcock Avenue.

The inclusion of these roads in the PBN does not mean the route currently provides optimal conditions for cyclists, however such outcomes are to be targeted in the long term. Treatment 7 above (Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction) is an example of a significant step recommended for a City-managed road to improve conditions on the existing PBN.

Figure 7-20 also indicates the proposed expansion of the PBN (Treatment 11 above) as part of this study. By adding Sheepwash Road, River Parade and Carr Street to the PBN, the northern residential precincts of Barwon Heads would be connected to the PBN. In combination with other cycling improvements to local roads (e.g. Treatment 9 (Taits Road – cycle improvements)) and proposals for further active travel connections (e.g. Treatment 10), this strategic action has the ability to increase cycling participation and improve safety for vulnerable roads users throughout Barwon Heads.



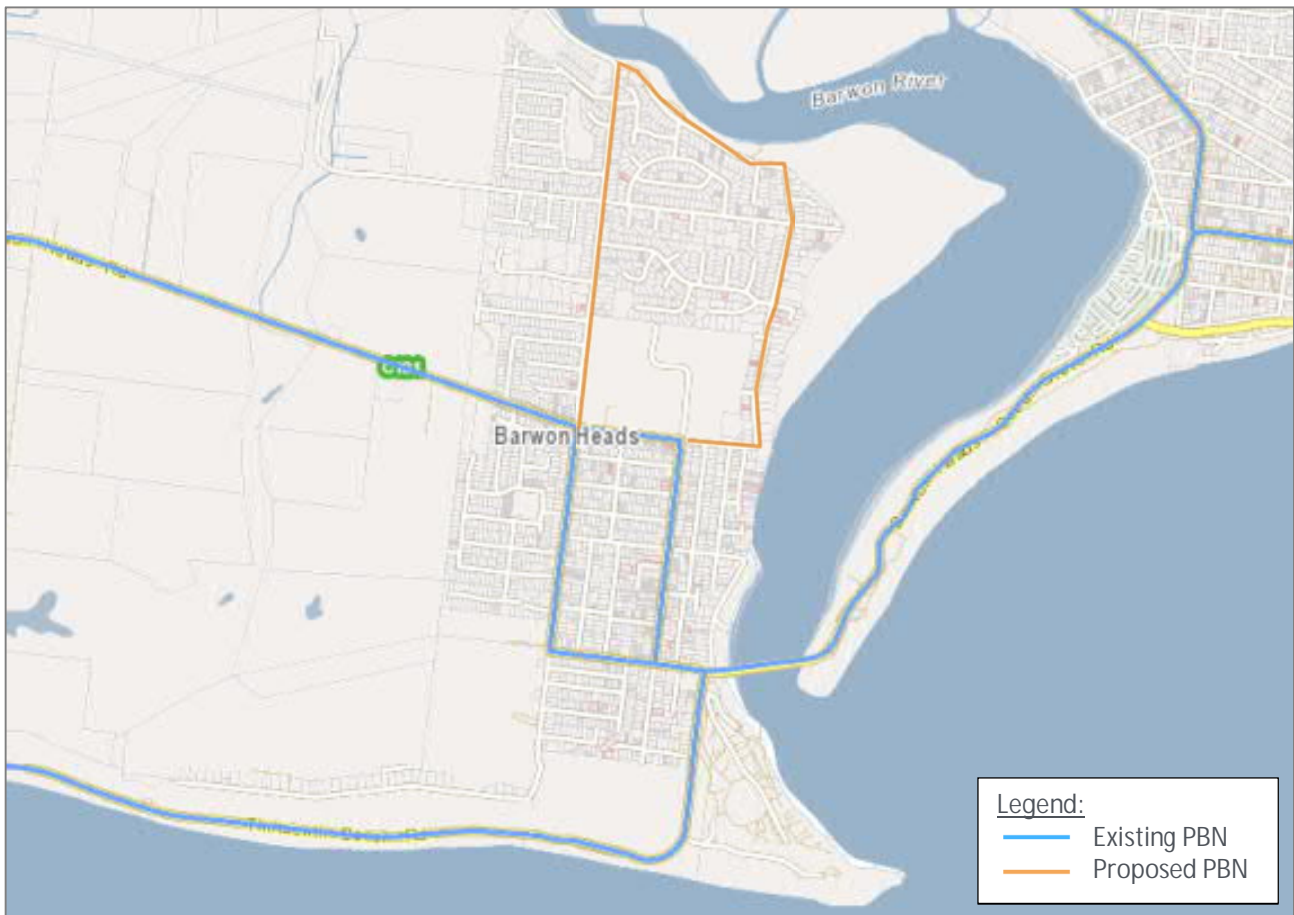


Figure 7-20: Barwon Heads PBN (Source: The City)

An example of desirable cross-section to be targeted for lower speed environments (i.e. 60km/h speed zone or less) is shown in Figure 7-21. While the ultimate cycling facility will vary according to constraints and other factors such as retention of 'coastal streetscapes' etc., the typical cross-section is indicative of the objective to provide a dedicated space for cyclists on PBN routes as opposed to a shared arrangement with vehicular traffic.

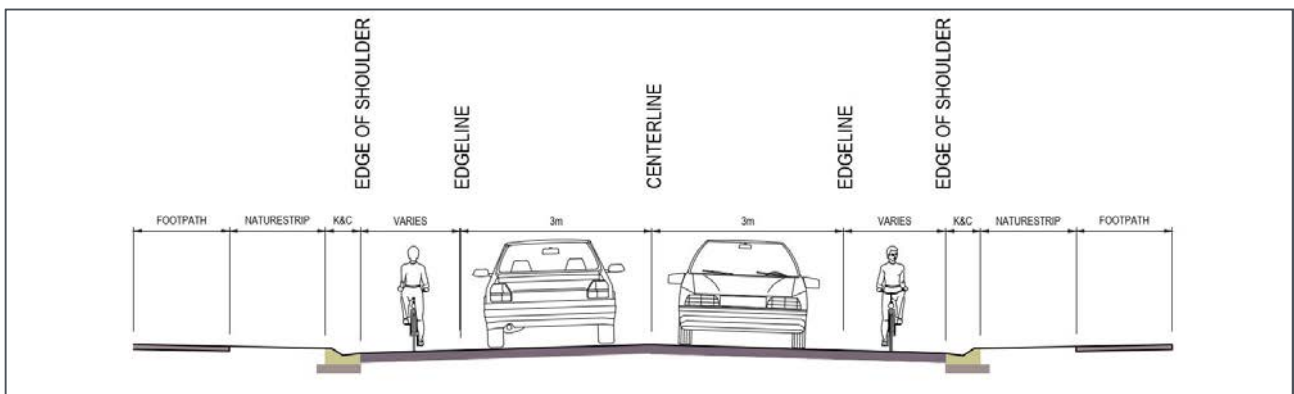


Figure 7-21: Desirable cross-section for proposed PBN

### 7.3.2 Safe Routes to School Network

Safe Routes to Schools (SRTS) is a local community-based road safety approach that responds to school-related road safety issues, which are one of the key barriers to students using active travel to access school. Issues may include busy roads, unsafe driver behaviour and local area traffic congestion around schools. These are often due to a high proportion of families choosing to drive children to school. By addressing these road safety issues in an integrated way, SRTS encourages more children to walk, scoot and ride their bikes to school.

Barwon Heads currently has two approved Safe Routes to School (i.e. to Barwon Heads Primary School), as indicated in Appendix F:

- The Western (red) SRTS runs along the east side of Golf Links Road and Sheepwash Road from Barwon Heads Primary School main entrance. Seabank Drive and Von Nida Avenue also connect this SRTS to the north side of the school.
- The Eastern (blue) SRTS runs from the Golf Links Road school crossing through local streets (Clifford Parade, Reid Street, Ozone Road and Jasper Avenue) to the Barwon Heads Community Park and drop off/pickup points and residential areas surrounding the park.

The above SRTS have been in operation since 2015. In 2018, the routes were audited by the City's transport team who prepared a report which included an overall assessment, items needing attention and actions for the City to implement. Through discussions with the school and the City the action items above have generally been implemented.

SMEC has assessed the existing SRTS routes. The Primary School is located to the south west corner of Barwon Heads. The majority of the Barwon Heads residential development is found to the north and north east of the primary school. The SRTS routes both focus on 'the last mile' to reduce the less reliance on car travel and improve conditions in the proximity to the school gate. Both routes provide suitable links to/from school. The Blue Route appears to be more favourable as it follows low speed / low volume roads and utilised two supervised crossing points. The Road Route is more direct however requires unsupervised crossing of the busy Barwon Heads Road / Golf Links Road roundabout. Large pedestrians refuge islands are available to these crossings points.

Regular and in-depth consultation with the school principal occurs which currently indicates no desire for changes or better alternatives to the current route safe routes to school. During consultation with the school as part of this study a number of minor safety improvements have been suggested. Community feedback submissions in Stage 1 Engagement included several direct references to safety concerns along the Eastern SRTS, and a range of safety concerns regarding speed and active travel that also relate to the SRTS. To enhance the SRTS and improve safety for school children the following treatments are recommended as part of this study:

- Stencilling treatments (refer to Figure 7-22) along the blue Eastern SRTS to address safety issues raised by the community. Stencilling treatments help school children and other active travellers navigate the safe route, whilst generating driver awareness and subsequent calming effects for motorists.
- Provide a footpath along Clifford Parade to connect Golf Links Road and Reid Street.



Figure 7-22: Potential Stencilling Treatment Option

### 7.3.3 Pedestrian Path Network

Pedestrian paths are generally provided on both sides of the major roads within the study area. Newer subdivisional areas (e.g. Seabanks Estate) provide footpaths on both side of the road. However, the majority of the older residential area provides a combination of footpaths on one side only or not at all.

Community feedback submissions in Stage 1 Engagement included several direct references to specific pedestrian path requests. Footpaths are recommended as part of this study at the following locations:

- Bridge Road between Golf Links Road and Hitchcock Avenue.
- Golf Links Road (south) to connect Thirteenth Beach Road with Bridge Road.
- Clifford Parade to provide a link between Golf Links Road and Hitchcock Avenue.
- Carr Street linking River Parade with Geelong Road.

- Von Nida Avenue to close the network gap between Seabank Drive and Hopgood Place.

The community express a desire for a mid-block footpath connection from Hitchcock Avenue to Grandview Parade. A review of the property status between Bridge Road and Colite Street revealed properties were generally privately owned limiting any opportunity to provide a mid-block link. The distance between Bridge Road and Colite Street is approximately 240m. This distance is relatively short in length so the need to provide a mid-block access is not considered a priority.

The above locations were identified as key focus areas. Outside these locations, a desire for footpaths was low or not identified. Through the community consultation an underlying message was provided by the community that widespread footpath/kerb and channel construction would diminish the 'coastal' values and character of the township.

#### 7.3.4 Parking Management

As outlined in the Integrated Comprehensive Transport Plan 2015, Council will take a balanced approach to achieving the transport outcomes needed in the City of Greater Geelong for maintaining its position as a popular place to live, work and visit. This approach aims to bring about real change in people's travel choices, and in the way the street spaces are used.

Parking within Barwon Heads is largely unrestricted, with no time limits applying. Exceptions to this include some short-term parking restrictions along the main activity strip of Hitchcock Avenue, as well as some localised short-term restrictions adjacent to businesses in locations such as Bridge Road and Flinders Parade.

The initial community consultation stage highlighted parking supply concerns and a desire for modifications to existing parking controls in and around the commercial precinct. The suggested modifications include:

- Extending the existing time-based restriction on Hitchcock Avenue north to Ozone Road; and
- Review restrictions to include sufficient disabled, loading and short-term spaces.

Other items raised by the community that fall into the parking management theme include residential parking permits and the City's approval process for new development sites.

##### 7.3.4.1 Intervention Levels

The City generally considers 85% occupancy as a threshold before consideration is given to reviewing parking restrictions. The 85% threshold means parking is well utilised with a few spaces available within a street or block. Prior to introducing parking restriction changes, residents/businesses and other owners affected by restrictions proposed will be consulted on the restrictions. The parking restriction will be assessed by Council and installed if the following is achieved:

- Parking occupancy of the subject area is 85% or greater for at least a 4 hour period; and
- Receives 50% or greater support.

##### 7.3.4.2 Parking Demand – Hitchcock Avenue

The existing Hitchcock Avenue time-based parking restrictions apply between Bridge Road and Colite Street which traditionally was the commercial centre. Commercial properties now extend further north to Ozone Road however no time-based parking restrictions apply adjacent to these properties. The community has highlighted a desire for the time-based parking restrictions to be extended north to capture these commercial properties.

The City engaged a data collection company to determine parking demand and occupancy for key areas on four separate days in January and February 2019. The parking surveys revealed the peak day was Saturday, 25<sup>th</sup> January 2020 with the lowest observed demand occurring on Wednesday 19<sup>th</sup> February 2020.

The peak survey day revealed parking occupancy for both sides of Hitchcock Avenue between Colite Street and Ozone Road was greater than 80% for eight hours. During the low demand day, the parking occupancy surveys revealed occupancy of greater than 80% for three hours. The parking survey findings generally meet the occupancy requirement for implementation of parking restrictions.

It is recommended that the City consult with Hitchcock Avenue property owners and tenants, between Colite Street and Ozone Road, to determine support for implementation of time-based parking restrictions.

### 7.3.4.3 Parking Control Type – Hitchcock Avenue

The community has identified a desire for a mixture of parking controls for Hitchcock Avenue which is to include 2P, 1/4P, loading zones and accessibility spaces.

#### Loading Zones

Loading zones are a shared spaced provided to support business with the pick up or delivery of loads/goods and are generally position where they service a number of adjacent businesses. There are currently two loading zones provided in Hitchcock Avenue. The Planning Scheme requires new commercial properties to provide adequate on-site loading facilities. New developments on Hitchcock Avenue would be required to provide on-site loading.

The current provision of loading zones is considered appropriate for the current commercial properties. It is not recommended that Council introduce any additional loading zone.

#### Accessibility Parking Spaces

Accessibility parking spaces are provided for people who require extra space to exit or enter their vehicles or require close proximity to certain places due to mobility impairments.

AS/NZS 2890.5:2020 Part 5 relates to on-street parking and includes parking requirements for people with disabilities. Table 4.2 of this Standard outlines the recommended minimum number of accessible spaces by land use. Commercial /Retail areas are recommended to provide 2% accessibility spaces of the total available parking spaces. The commercial/retail area of Barwon Heads is generally considered Hitchcock Avenue between Bridge Road and Ozone Road. This section provides 71 on street parking spaces which two accessibility parking spaces. Current 3% of the total available parking spaces is dedicated to accessibility parking which complies with AS/NZS 2890.5:2020. It is not recommended that additional accessibility parking spaces be provided.

#### Accessibility Parking Space Layout

AS/NZS 2890.5:2020 Part 5 also specifies the required layout for accessibility parking spaces. Figure 7-23 provides the required dimensions for an accessibility parking space. The accessibility bays in Hitchcock Avenue are 2.1m wide and 6m length. This does not comply with AS/NZS 2890.5:2020.

It is recommended that Council upgrade the existing spaces to align with requirements outlined in AS/NZS 2890.5:2020. It is noted providing the required accessibility bay dimensions will result in the reduction of parking bay number and footpath width.

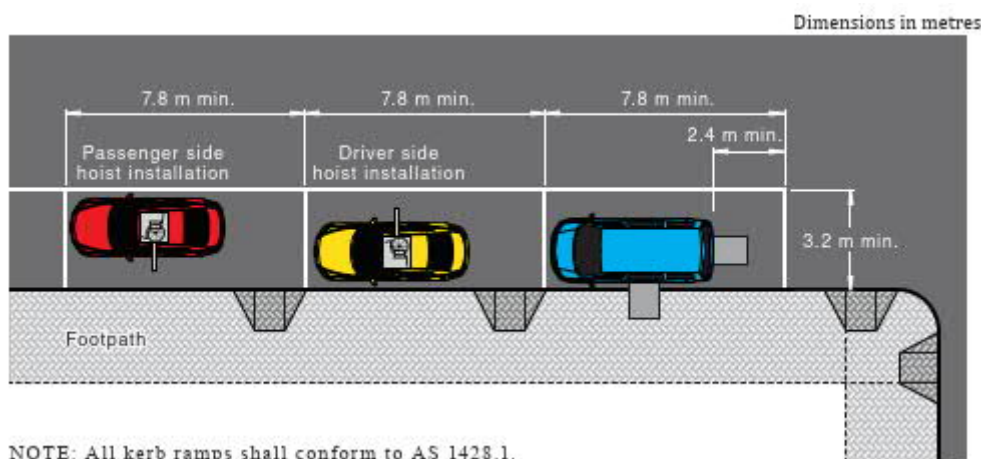


Figure 7-23: Parallel Accessibility Parking Space Layout (AS/NZS 2890.5)

### 7.3.4.4 Parking Demand – Ozone Road

A desire for 2P parking controls on Ozone Road near the intersection of Hitchcock Avenue has been identified by the community during the Community Stage 1 engagement period. No parking restrictions are provided within Ozone Road however 'hockey stick' markings are provided to identify individual parking bays and deter people from parking across driveways. Parking demand and occupancy for Ozone Road occurred on four separate days in January and February 2019 for the section west of Hitchcock Avenue to Grove Road.



The peak survey day revealed parking occupancy for Ozone Road between Grove Road and Hitchcock Avenue was generally above 80% between 8am and 1pm. During the low demand day, the parking occupancy surveys revealed occupancy was not greater than 50%. The parking survey findings suggest on-street parking is influenced by seasonal activities.

It is not recommended that Council implement time-based parking restrictions for this section of Ozone Road.

#### 7.3.4.5 Parking Demand – Bridge Road

Bridge Road was identified by the community as a road having parking supply concerns. The parking supply and occupancy surveys revealed that Bridge Road proposed 72 spaces with peak occupancy during the peak period of 64% (46 spaces used with 26 spaces available). The community has identified a desire for parking modifications on Bridge Road between Hitchcock Avenue and Grandview Parade (near to the IGA Supermarket).

The parking survey data revealed parking occupancy on the north side of Bridge Road two of the three spaces were generally occupied from 9am to 5pm for both the peak and off-peak situation. The occupancy of the unrestricted spaces on the south side near the IGA was low. Drivers may be reluctant to use these spaces due to a number of factors that include proximity to the zebra crossing, proximity to driveways and lack of linemarking.

Bridge Road between Hitchcock Avenue and Flinders Parade is typically commercial. To provide a consistent approach to parking control for the commercial areas of Barwon Heads short term parking restrictions (eg 30min, 1P, 2P) should be considered. It is recommended that the City consult with property owners for this section of Bridge Road to determine support for the implementation of time-based parking restrictions.

Due to existing vehicle crossovers only one legal space is available between the zebra crossing and the short term parking adjacent to the IGA Supermarket. To provide additional parking the crossovers would need to be removed. The owner of the property has indicated that these access points are still required and therefore no additional parking spaces can be provided on the south side of Bridge Road.

#### 7.3.4.6 Parking Demand – Clifford Parade

Clifford Parade was identified by the community as a road having parking supply concerns. Clifford Parade, between Hitchcock Avenue and Grove Road, is likely to attract spill over parking related to the adjacent commercial area. The parking survey data does indicate higher occupancy rates for Clifford Parade east of Grove Road when compared to the west side of Grove Road.

The peak survey day revealed parking occupancy of Clifford Parade, between Hitchcock Avenue and Grove Road, was generally 60% between 10am and 3pm. During the low demand day, the parking occupancy surveys revealed occupancy was generally 50% between 10am and 3pm. The parking survey findings do not meet the occupancy requirement for implementation of parking restrictions.

It is not recommended that Council implement time-based parking restrictions.

#### 7.3.4.7 Residential Only Parking Permit Scheme

During the Community Stage 1 Consultation period, the theme of residential only parking permits was raised. The City currently provides a residential parking permit scheme to residents who have a time-based restriction in their street.

It is noted that the City does not implement residential only street parking or such permit systems. The City has no current plans to implement such a scheme or permit system.

#### 7.3.4.8 Parking Opportunities/Constraints

##### CBD off-street parking facilities

A general theme provided during the community consultation was a desire for Council to provide additional off-street parking facilities. Barwon Heads residents have expressed a desire to be less reliant on car travel and reduce their impact on the environment. Providing off-street parking does not align with the community's aspirations as providing additional parking would further encourage car usage. The most appropriate approach would be to efficiently manage the available parking while encouraging alternative ways to the town centre.

The Urban Design Guidelines for Victoria indicate that car parking lots are important in supporting some businesses and remove customer parking away from neighbouring residential streets. Where land is freely available and land values are relatively low, car parking lots are an option to consider. Carparking lots do have associated negative impacts that include:



- Create barriers for pedestrians;
- Radiate heat in summer;
- Generate poor quality stormwater run-off; and
- Potential to attract anti-social behaviour.

A car parking lot would need careful design to ensure it adds to the vibrancy / character of a town centre. The parking survey data does indicate that parking is generally available within 300m (3 minute walk) of Hitchcock Avenue. It is also noted that land values in the Barwon Heads town centre are significant and there is limited land available.

Given the availability of parking within close proximity to the town centre and considering the cost and amenity impacts created by off-street carparks it is not recommended that Council purchase land for an off-street car park in the vicinity of Hitchcock Avenue.

#### Former Preschool Site (Clifford Parade)

Following on from the above, the community identified a specific location to address the desire for an off-street parking facility. The Barwon Heads Preschool site on Clifford Parade was suggested by the community as a potential location to provide an off-street parking facility. There is a current planning permit which will see this site developed into an Arts and Community Hub. As part of this planning permit the site will provide parking for patrons accessing the Arts centre and Senior Citizens centre. Barwon Heads has a strong and passionate arts community. This hub will encourage further creative expression and enable more social connection between community members. This location would pair an existing community facility to the new arts facility. Further information relating to the arts hub can be found on the City's website.

#### Seaview Avenue parking area

This parking area is currently unsealed with informal parking occurring as can be demonstrated in Figure 7-24.



Figure 7-24: Aerial Imagery 25 November 2020 and 30 December 2015 (source: NearMap)

Direction parking signage indicates that 25 spaces are provided in this facility. Due to the informal nature of the parking area, accommodating 25 parked vehicles is unlikely to be achieved as vehicles judge what they consider an appropriate space. AS/NZS 2890.1:2004 relates to the requirements for off-street car parking. A sketch based on the dimensions outlined AS2890.1 has been prepared and demonstrates that 28 spaces could be provided in the current footprint. The layout is presented at Figure 7-25 and would assume one-way operation and employee/commuter parking – generally all-day parking.

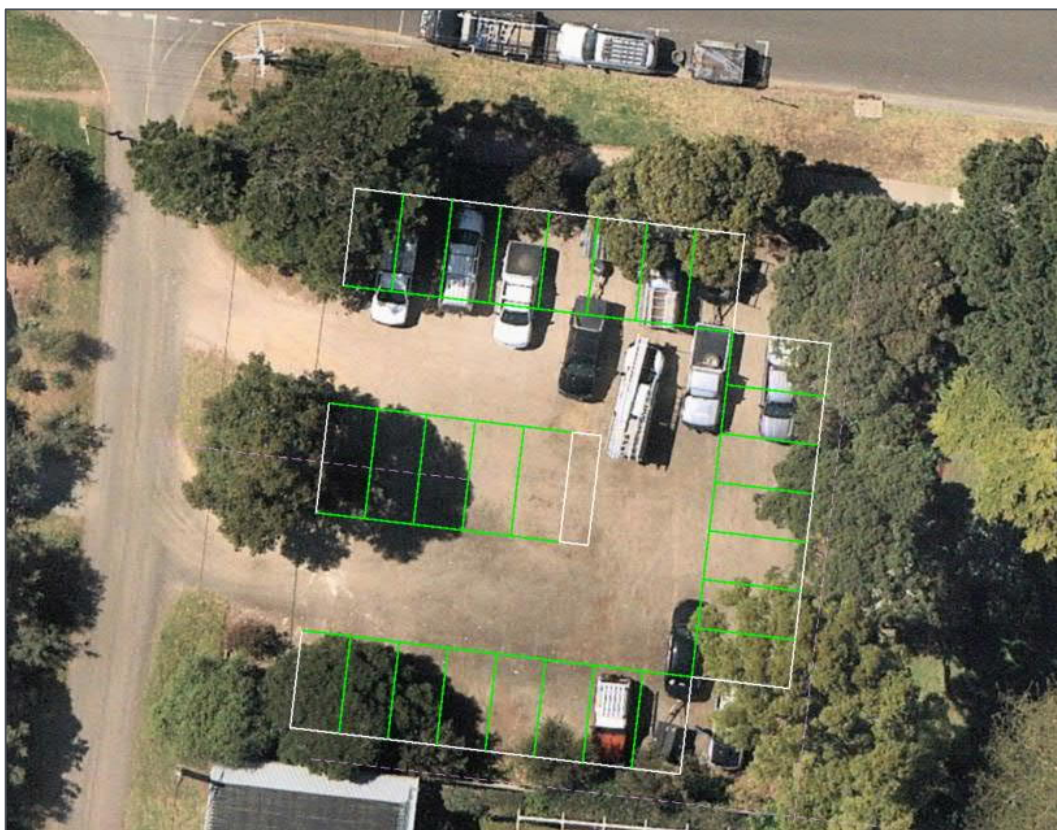


Figure 7-25: Seaview Avenue Potential Parking Area Layout (image source: NearMap)

### 7.3.5 Planning Assessments/Parking Waivers

A planning permit is a legal document that gives permission for a use, development or subdivision on a piece of land. The City's Statutory Planning Department is responsible for processing planning permit applications and the general administration of the Greater Geelong Planning Scheme. Some of the most common themes of concern relating a planning permit with parking waivers included:

- Changes in use of land (e.g. residential to mixed/commercial use); and
- Subdivision of land for multiple dwellings.

Parking waivers have been supported for a number of developments along Hitchcock Avenue. The provision for parking waivers is determined through the planning permit process on a case by case basis. Site sizes in Barwon Heads are relatively small, so a strict requirement to meet the parking requirements would inhibit the ability to develop sites viably. There does need to be careful consideration over the scale of development, particularly where there is a residential component to the development.

The community highlighted concern that parking waivers granted by Council in town planning permit approvals are having detrimental impacts to local amenity. When assessing commercial/mixed use development proposals Council takes into consideration the level of on-site parking to be provided. Where the proposed on-site parking is below the parking scheme requirement, Council implements conditions on the planning permit to limit the parking impact. The primary conditions that Council will includes as conditions include:

- limiting the number of practitioners; or
- specifying a maximum number of seating/patrons.

Additional mechanisms Council uses to minimise parking impacts is to ensure end of trip facilities are provided and requiring the developer to upgrade pedestrian facilities to encourage alternate travel modes.

Council look to balance the benefits in allowing new business and development, which supports the economic growth of the town, against potential impacts. Small businesses provide character and individuality to a community. A thriving shopping district creates an impression of vitality and wealth, producing a positive impression of the community overall.

This approach has been adopted by the City in recent planning assessments. Planning approval has been granted for 66 & 68 Hitchcock Avenue which includes the building of four shops, eight apartments dwellings and partial reduction of carparking. The assessment on the carparking indicated the provision is adequate to accommodate the projected demand. On-street car parking demand associated with the subject site can be adequately accommodated during non-peak periods which was demonstrated by car parking occupancy surveys. During the peak tourist periods, the demand associated with the subject site is anticipated to be lesser as more tourists attend the precinct rather than a particular venue, and overall, the development would be expected to have a negligible impact. This assessment is appropriate as the parking survey data indicates parking availability during off peak. During peak season, parking survey data indicates parking availability within 300m (3 minute walk) of this site. Tourists are visiting the commercial area (typically not a specific venue) with the impact being negligible.

The theme of short-term holiday accommodation (AirBnB, Stayz, et al) was present during the community engagement. A concern relating to insufficient parking being provided by these uses was having an impact on amenity and resulting in localised high demand for on-street parking. The Planning Scheme does not differentiate between houses which are used as primary residences and those used as holiday houses. Provided that the on-site parking requirements of the Planning Scheme for a standard dwelling are met then additional on-site parking is not required. It is noted that short-term holiday accommodation typically utilise private property. The City cannot control how people utilise their own property.

### 7.3.6 Major Projects

Recent, current and future major transport projects that are relevant to traffic and parking conditions in Barwon Heads are outlined below.

#### 7.3.6.1 Bellarine Link

Bellarine Link is proposed to provide an additional crossing of Barwon River. Major Road Projects Victoria is carrying out the planning and investigation work for this extension to the Geelong Ring Road which aims to improve safety, reduce congestion, accommodate future urban growth in the area and improve travel times on the Geelong road network. The main benefit will be provided to Geelong's City Centre by acting as a ring road continuation. The proposed road alignment would generally consume the existing Reserve Road corridor.

Based on the information available at the early stages of planning for Bellarine Link, Barwon Heads is unlikely to experience any notable impacts from the project and therefore no associated recommendations are made at this time.

#### 7.3.6.2 Barwon Heads Road Duplication

The Barwon Heads Road Duplication project will upgrade four kilometres of the corridor between Settlement Road and Reserve Road. The project increases the capacity of Barwon Heads Road to accommodate the urban growth of Armstrong Creek Corridor. The duplication includes a bridge over the railway line at Marshall (removing the existing level crossing), intersection upgrades and safety improvements. While growth associated with development in Armstrong Creek is likely to contribute to increased traffic volumes throughout the City over time, the road project itself is not anticipated to significantly impact volumes in Barwon Heads.

### 7.3.7 Future Growth and Movement Projects

Barwon Heads is a well established community and within the township there are limited opportunities for future development, although it is anticipated that some development will occur. Barwon Heads is largely zoned as Neighbourhood Residential Zone. This zoning has been applied in order to manage and ensure development respects the identified neighbourhood character, heritage, environment or landscape characteristics.

Commercial Zone and Mixed Use Zone applies to Hitchcock Avenue (Clifford Parade to Ozone Road). It is anticipated that development will continue to transition this section of Hitchcock Avenue towards a higher mix of commercial premises.

Additional development is most likely to be in the form of multi-unit developments on existing residential lots within the township. This would lead to some additional traffic generation.

Any changes to traffic volumes/traffic patterns in the short to medium term as a result of additional development in Barwon Heads are expected to be moderate and incremental in nature.



### 7.3.8 Public Transport Provision

Public transport in Barwon Heads is limited to the following:

- Bus Route 55 – Geelong to Ocean Grove via Barwon Heads is the only bus route operating within the township. The service runs (on average) every hour during weekdays (with an increase in frequency during peak times) and every two hours during weekends. On Saturday and Sunday, the service runs approximately every 2 hours with less early morning and later evening buses<sup>4</sup>. The bus route is shown in Figure 4-3 (Section 4.2).
- A free shuttle bus, serviced by the Barwon Coast Committee of Management (BCCoM), operates between Barwon Heads and Ocean Grove during the holiday period. The bus operates daily, on the hour, eight times per day.

There is no train line/network within the area. The closest train station is Marshall Railway Station, approximately 14.5km north-west of the Barwon Heads town centre. Marshall Railway Station is a V/Line train station, serviced by the Melbourne-Geelong and Melbourne-Warrnambool services.

According to data supplied by Department of Transport (DoT), providing average daily Myki scan-on figures (for 'normal weekdays'), utilisation of Bus Route 55 is summarised as follows:

- The daily scan-on average is 159 for the outbound journey (i.e. to Ocean Grove) and 153 for the inbound journey (i.e. to Geelong);
- The daily scan-on average at bus stops within the Barwon Heads township is 8 for the outbound journey (i.e. to Ocean Grove) and 38 for the inbound journey (i.e. to Geelong).

The above represents low levels of utilisation for Bus Route 55.

Seasonal delays are noted as an issue for the bus service where congestion associated with the Barwon River crossing impacts travel times for buses as it does for general traffic. DoT has advised splitting the Route 55 service in such times so that Ocean Grove and Barwon Heads are services separately is an option to improve service reliability in the future, however there are no plans to implement this change at the current time.

Limited community concern around public transport was observed in Stage 1 Engagement feedback. The geographic nature of Barwon Head results in a heavy reliance on private vehicle usage for many long and short trips, and active travel as an attractive alternative for short trips given the general 'walkability' within the township. This is reflected in the low ridership volumes for Bus Route 55 noted above. Accordingly, there is no justification to recommend expansion or change to public transport within and to/from Barwon Heads as part of this study.

### 7.3.9 Speed Zoning

Speed zoning has been reviewed as part of this study. Stage 1 Community Engagement submissions included concerns regarding speeds travelled on roads within Barwon Heads, and requests for widespread speed limit reductions throughout the township.

Speed limits are set in accordance with State guidelines, to establish appropriate and consistent speed zoning across the network. This achieves simplicity and a system that is easier for drivers to comply with, as opposed speed limits that are selected or changed in an attempt to address issues such as road safety. Furthermore, an approach to speed reduction via physical calming measures to generate a road environment that is more conducive to the desired operating speed, is the preferred and more effective method to improving road safety; particularly for the function and condition of most roads within the Barwon Heads township.

Therefore, on review of speed zones within Barwon Heads, current speed limits are generally considered appropriate for respective road function and changes are not proposed. This is with exception to the following two recommendations:

- Treatment 7 – as part of the proposed safety improvements for pedestrians and cyclists along Thirteenth Beach Road, it is recommended to extend the existing 60km/h speed limit to include the beach carpark at 36w. This supports improvements for cycling and reduces the likelihood and severity outcomes of crashes along this stretch of road which is subject to heavy cycling, pedestrian, parking and tourist activity.

<sup>4</sup> Barwon Heads Structure Plan

- The 40km/h speed limit on Hitchcock Avenue should be considered for extension north to Ozone Road, to align with the proposed parking restriction area/commercial area. This minor change to speed zoning would result in a more consistent and appropriate speed limit for adjacent land uses as the commercial precinct has evolved and expanded north.

Based on consideration to surveyed vehicle speeds and the appropriateness of speed limits for respective road function around Barwon Heads, no other roads are recommended for speed limit changes.

## 7.4 Issues on State-Owned Roads

Within the study area, roads along the State Arterial Route consisting of Barwon Heads Road, Golf Links Road, Bridge Road and Barwon Heads-Ocean Grove Road are owned by Regional Roads Victoria (RRV)/Department of Transport (DoT). Several issues/requests were raised by the community in Stage 1 Engagement which relate to these State-owned roads. The City consulted with RRV/DoT to identify a course of action for such items. Responses from the State are provided in Table 7-13.

Table 7-13: Actions/responses for traffic issues and requests regarding State-owned roads

Location	Issue	Responses from the State regarding Issues on State-owned Roads
Barwon Heads Rd / Lings Rd intersection	Intersection safety	This intersection is currently subject to a planning permit for a development. This development is likely to trigger an upgrade to include turning lanes.
Barwon Heads Rd	Speed related concerns / speed limit reduction requests	The speed limits are reviewed and monitored as traffic volumes, roadside development or crash risk change on the network. The Department of Transport has a number of safety improvements proposed on Barwon Heads Road to reduce some of the crash risk between Armstrong Creek and Barwon Heads. The speed limit on Barwon Heads Road in Armstrong Creek, between Marshalltown Road and Lower Duneed Road, which is currently a mix of 60km/h and 80km/h, will be changed to 70km/h due to increased development, new signalised intersections and a roundabout, and crash risk.
Golf Links Rd	Safety for pedestrians crossing Golf Links Rd	An assessment of the number of pedestrians crossing at Ozone Road, if not completed as a part of this study, will need to be undertaken. Before proceeding, we would be keen to understand if this will become a key pedestrian corridor in the future. It is likely a refuge island would be a suitable upgrade, should the review identify a need to upgrade a crossing point.
Bridge Rd / Hitchcock Ave intersection	Congestion and safety issues related to the Bridge Rd precinct	<p>In 2015/2016, the Department of Transport, working closely with the City of Greater Geelong and local community representatives, set about identifying improvements to Bridge Road, with a key focus on improving pedestrian access and safety, in particular near the Hitchcock Avenue roundabout.</p> <p>Following the development of a number of options, the current treatment was selected as it met a number of community led objectives; a treatment that provided the highest possible priority for pedestrians, catered for the preferred desire lines and improved amenity in both streets by calming traffic speeds. Traffic modelling was also undertaken on all of the options, with the current location of the pedestrian crossing showing better performance than a set of pedestrian traffic lights, or the replacement of the roundabout with a set of traffic signals at the intersection.</p> <p>Minor improvements in 2018, along with the use of traffic controllers in peak times, have improved travel times to a point</p>



Location	Issue	Responses from the State regarding Issues on State-owned Roads
		<p>similar to measurements taken prior to the pedestrian crossing being installed.</p> <p>In summer, this is a key pedestrian area. The prioritisation of the movement of pedestrians and cyclists in this location is critical to the function of Barwon Heads in peak summer times.</p> <p>Given the high number of community responses that raise this concern, and the recent crash history, a review of other improvements and recommendations from this study will be considered by the Department of Transport.</p> <p>From a congestion point of view, the Department of Transport has been undertaking planning for a new corridor from Armstrong Creek to the Bellarine Peninsula. This corridor is likely to provide an alternative route for traffic that is currently travelling through Barwon Heads. Although there is no timeframe for the construction of this link road, it signals an approach to traffic management in Barwon Heads which supports slower speeds, whilst being conscious of providing smooth traffic flow along the arterial road corridor.</p>
Geelong Rd / Barwon River	Congestion / requests for a second bridge across the Barwon River	The Department of Transport maintains its support for the findings of the 2007 independent Planning Panel to reject a second crossing (Corridor 2) as it offers no advantages, a number of significant disadvantages and overall a lower level of benefit to the community.

## 8 Implementation

Implementation planning is critical to ensure the themes identified in the development of this study are resolved through the proposed treatments. Each recommendation will be implemented through a mix of mechanisms including through the Council capital works plan, Council planning processes and advocacy initiatives that will deliver on the vision and directions in this Plan.

### 8.1 Implementation Plan

The following table summarises the recommendations / proposed actions. Indicative timings have been assigned with consideration to the level of benefit balanced against likely cost. In general, high benefit, low-cost recommendations are given a higher priority. Indicative timings are categorised as follows:

- Short term – 0 to 2 years
- Medium term – 3 to 6 years
- Long term – 7+ years

Table 8-1: Implementation Plan

No.	Action / Recommendation	Timeframe	Comments
1	Sheepwash Road – pedestrian refuge island (at Coogee Court)	Medium Term	Community feedback indicates that Saratoga Avenue and Geelong Road roundabout locations are critical in servicing pedestrian desire lines.  The City to assess accessibility to Village Park and adjacent properties to validate constructability.
2	Geelong Road / Hitchcock Avenue – intersection improvements	Medium Term	Community feedback indicates further refinement of design to ensure active travel modes are provided.  The City to assess accessibility to Village Park to validate constructability.
3	Hitchcock Avenue / Ozone Road – intersection improvements	Short Term	Community feedback indicates further refinement of design taking into consider parking conditions and vulnerable road users.  The City to assess impacts on cyclist and pedestrian movements along Hitchcock Avenue.  Kerb outstand treatments may provide greater benefit.
4	Ozone Road – raised platform intersections at Seaview Avenue and Margate Street	Short Term	Community feedback indicates potential associated works could be incorporated into treatment.  The City to assess interface with Seaview Avenue (south) which is currently unsealed.  The City to review access to Seaview Avenue off-street parking area.
5	Bridge Road / Golf Links Road – provision of new footpath	Short Term	-

No.	Action / Recommendation	Timeframe	Comments
6	Seaview Avenue – chicane treatment/s for traffic calming	Medium Term	Community feedback provided a mixed view on treatment priority. Five comments indicated the chicanes would support the treatment at northern end and needed. Four comments indicate they be unnecessary.  The City to assess viability of treatment due to low community priority and existing low recorded vehicle speeds.
7	Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction	Medium Term	Community feedback indicates potential associated works could be incorporated into treatment.  Protected vegetation and sand dunes may prevent limit treatment viability.
8	Barwon Heads area – active transport path improvements	Long Term	Community feedback indicates support for treatment however environmentally sensitive design is required.  The City to consult with Parks Victoria and CCMA to validate viability.
9	Taits Road – cycle improvements	Short Term	Community feedback indicates ‘step towards’ treatment needs to be consistently applied through Barwon Heads to ensure effectiveness.
10	Golf Links Road – footpath and cycle improvements	Short Term	The City to assess vegetation, drainage and potential usage to validate constructability.
11	Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements	Long Term	The City to assess drainage and drainage capacity to validate constructability.
13	Carr Street – drainage upgrades, footpath provision and width for bike lanes/safe passing width	Long Term	Although treatment received high support from respondents, feedback included disapproval for widespread footpath/kerb and channel construction.  This treatment is viewed to diminish the ‘coastal’ values and character of the township.  Furthermore, significant native vegetation abuts the roadside and would be lost in any effort to widen road or install footpaths.
14	Thirteenth Beach Road – provision of gravel path	Short Term	Protected vegetation and sand dunes may prevent limit treatment viability.
15	Safe Travel to School Routes – road stencilling	Short Term	Community feedback indicates supporting treatment could be implemented with stencilling.
16	Von Nida Avenue – provision of new footpath	Short Term	-

No.	Action / Recommendation	Timeframe	Comments
17	Barwon Heads Road Service Road – conversion to one way	Short Term	Community feedback indicates supporting design ideas could be implementing with the treatment that include: <ul style="list-style-type: none"> <li>• Parking controls at entry/exit locations</li> <li>• Improved interface with Barwon Heads Road and nearby roundabout</li> </ul>
18	Hitchcock Avenue – bicycle parking	Short Term	Community feedback indicates additional sites are to be considered that include: <ul style="list-style-type: none"> <li>• Coffetti/Sunbaker (#49 Hitchcock Av)</li> <li>• River Park</li> <li>• Bridge Road</li> </ul>
19	Hitchcock Avenue – time based parking restrictions (Colite Street to Ozone Road)	Short Term	The City consult with Hitchcock Avenue property owners and tenants to determine support for implementation of time-based parking restrictions.
20	Hitchcock Avenue – Accessibility Parking Bay Upgrade	Medium Term	The City to review parking bay dimensions to ensure compliance with Australian Standards.
21	Bridge Road – time based parking restrictions (Hitchcock Avenue to Grandview Parade)	Short Term	The City consult with Bridge Road property owners and tenants to determine support for implementation of time-based parking restrictions.
22	Seaview Avenue – formalising the off-street parking area	Medium Term	The City to assess vegetation, drainage and available footprint to validate constructability.
23	Thirteenth Beach Road – speed zoning change (Black Rock Road to Surf Life Saving Club)	Medium Term	The City seek approval with RRV/DoT to enable zoning change.
24	Hitchcock Avenue – speed zoning change (Colite Street to Ozone Road)	Short Term	The City seek approval from RRV/DoT to enable zoning change. Item to align with Item 19.

## 8.2 Strategic Items

A number of strategic items were discussed in the sections above. Of these identified above the only item that requires further action is to consider the adoption of Sheepwash Road, River Parade and Carr Street to the Geelong PBN.

## 8.3 Proposals Not Adopted to The Implementation Plan

The following table summarises proposed treatments that were presented to the community for comment but have not been adopted into the Implementation Plan. Commentary for the omission from the Implementation Plan has been provided.



No.	Proposal	Comments
1	Sheepwash Road – pedestrian refuge island (at Saratoga Avenue)	<p>Although treatment received high supported by respondents, the potential impacts on CFA operations.</p> <p>The bus stops south of Saratoga Avenue and a number of driveways on Sheepwash Road mean this proposal is not viable.</p>
2	Clifford Parade – footpath provision	<p>Although treatment received high support from respondents the pump house at Grove Road and Clifford Street limit path alignment options. The level differences between the property line and kerb also limit path alignment options. This proposal is not considered viable.</p> <p>The City to review access to alternate east-west route (eg Bridge Road, Ozone Road).</p>

## 9 Conclusions

This study arose from the City's desire to investigate transport movements and parking in Barwon Heads with the aim to promote sustainable movement, improve pedestrian and cycling accessibility and safety and review parking restrictions. The purpose of this study was to identify the key transport issues and opportunities facing Barwon Heads, develop preferred options to address these issues and opportunities, and prepare recommendations.

Community Engagement Stage 1 invited members of the community to provide feedback to inform the Barwon Heads Transport and Parking Study. Local residents, business owners and visitors were asked to contribute by identifying the key transport, parking, pedestrian and cyclist issues and opportunities within the area. Nearly 400 submissions were received, including a submission by the Barwon Heads Association. All feedback was assessed, and the following key themes were identified:

1. Traffic congestion, delays and safety;
2. Parking provision;
3. Pedestrian and cyclist access and safety;
4. Public transport; and
5. High heavy vehicle traffic.

Proposed actions for the Barwon Heads area were established based on the Community Engagement Stage 1 findings and analysis of traffic and parking data. For the City-managed roads, a series of treatments were developed and presented on the City website for 'Stage 2 Engagement', allowing further community feedback on specific proposed treatments. The 'preferred' treatments aim to address high-priority issues as indicated by the community and traffic/crash data. Larger and broader issues identified in this study were explored as 'Strategic Items'.

Community Engagement Stage 2 invited the community to provide feedback on the proposals. 169 members of the community fully or partially completed the online survey. Participants selected the specific treatments which they would provide feedback on which resulted in between 10 and 56 responses were received for each treatment.

Following consultation with Council officers, this report presents the outcomes of the consultation and resulting recommendations. These are detailed in Section 8 and include the following key improvements:

- Road Safety:
  - Geelong Road / Hitchcock Avenue – intersection improvements
  - Hitchcock Avenue / Ozone Road – intersection improvements
  - Ozone Road – raised platform intersections at Seaview Avenue and Margate Street
  - Seaview Avenue – chicane treatment/s for traffic calming
  - Carr Street – drainage upgrades
  - Barwon Heads Road Service Road – conversion to one way
  - Thirteenth Beach Road – speed zoning change (Black Rock Road to Surf Life Saving Club)
  - Hitchcock Avenue – speed zoning change (Colite Street to Ozone Road)
- Parking Changes:
  - Hitchcock Avenue – time based parking restrictions (Colite Street to Ozone Road)
  - Hitchcock Avenue – Accessibility Parking Bay Upgrade
  - Bridge Road – time based parking restrictions (Hitchcock Avenue to Grandview Parade)
  - Seaview Avenue – formalising the off-street parking area
- Pedestrian/Bicycle Access:
  - Sheepwash Road – pedestrian refuge island (at Coogee Court )
  - Bridge Road / Golf Links Road – provision of new footpath
  - Thirteenth Beach Road – cycle and pedestrian improvements, wayfinding signage and speed reduction
  - Barwon Heads area – active transport path improvements
  - Tait's Road – cycle improvements
  - Golf Links Road – footpath and cycle improvements
  - Sheepwash Road, Carr Street and River Parade – footpath and cycle improvements
  - Carr Street – footpath provision and width for bike lanes/safe passing width

- 
- Thirteenth Beach Road – provision of gravel path
  - Safe Travel to School Routes – road stencilling
  - Von Nida Avenue – provision of new footpath
  - Strategy Items
    - Adopt Sheepwash Road, Carr Street and River Parade to the PBN

Recommendations for implementation of the above treatments and actions have been made to establish a high-level plan for the progressive undertaking of tasks set out in the study.

## 10 References

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

- Barwon Heads Traffic and Parking Study, GTA consultants, 18 February 2010;
- Barwon Heads Structure Plan, City of Greater Geelong, August 2017;
- City of Greater Geelong Settlement Strategy, City of Greater Geelong, October 2018;
- Cleaver and Creative Future, City of Greater Geelong, 2017;
- Geelong and Bellarine Tourism Development Plan, 2019;
- Traffic and parking surveys undertaken by City of Greater Geelong and others;
- Department of Transport traffic volume data;
- Department of Transport crash data;
- ABS Census Data 2016; and
- Inspections of the study area.



## Appendix A    Stage 1 – Community Issues / Opportunities

# BARWON HEADS TRANSPORT STUDY

## COMMUNITY ENGAGEMENT SUMMARY REPORT (STAGE 1)

On 4 May 2020, the City commenced round one of community engagement with locals and residents of Barwon Heads to identify key transport issues and opportunities within the town and to develop preferred options to address these issues and opportunities.

Using this feedback, the Barwon Heads Transport and Parking Study will inform a plan that promotes sustainable transport, improves pedestrian and cycling accessibility, enhances safety and reviews parking conditions for the benefit of the community now, and in the future.

Round one of engagement is closed for evaluation and review with future workshops being planned for further community engagement. Round two engagement will commence in July and the City will again invite the local community to participate in assessing potential options and ideas to address opportunities or issues that were heard.



**40 DAYS**  
of engagement  
(Stage 1)



**385**  
suggestions (comments)  
from the public left online  
via social map



**130**  
number of people  
to leave feedback



**5**  
print adverts  
in local  
newspapers



**8**  
hardcopy  
surveys  
received

### SOCIAL MEDIA



**44,008**

Reach/Impressions

**3,245**

Actions (Clicks, reactions,  
shares, comments etc.)



**59**

people following  
the project



**1**

radio  
announcement  
on Krock



**4**

advertising pamphlets  
in shopping strip in  
Barwon Heads

# Barwon Heads Transport & Parking Study

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Data & Community Engagement Summary

# Project Timeline



## Stage 1 Engagement

Online feedback of opportunities and issues gathered from the community



## Information Collated

All feedback will be assessed and key themes identified



## Stage 2 Engagement

The City will present potential solutions to address issues/opportunities and seek comment from the community



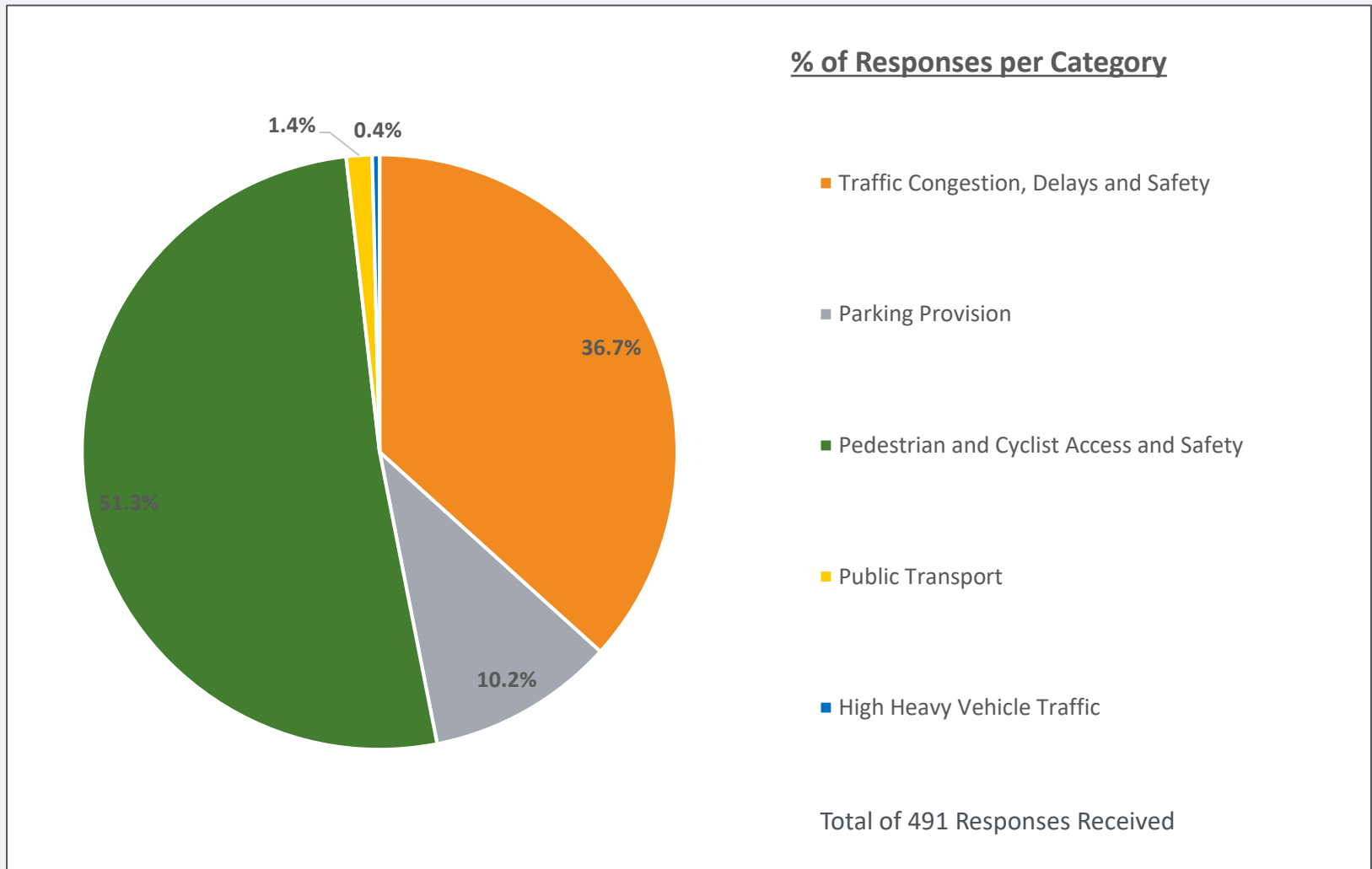
## Barwon Heads Transport & Parking Report finalised

The final report will include recommendations on how to address issues/opportunities that have been agreed upon by the City and the community. Additionally an implementation plan on how to achieve these outcomes and when will be included.



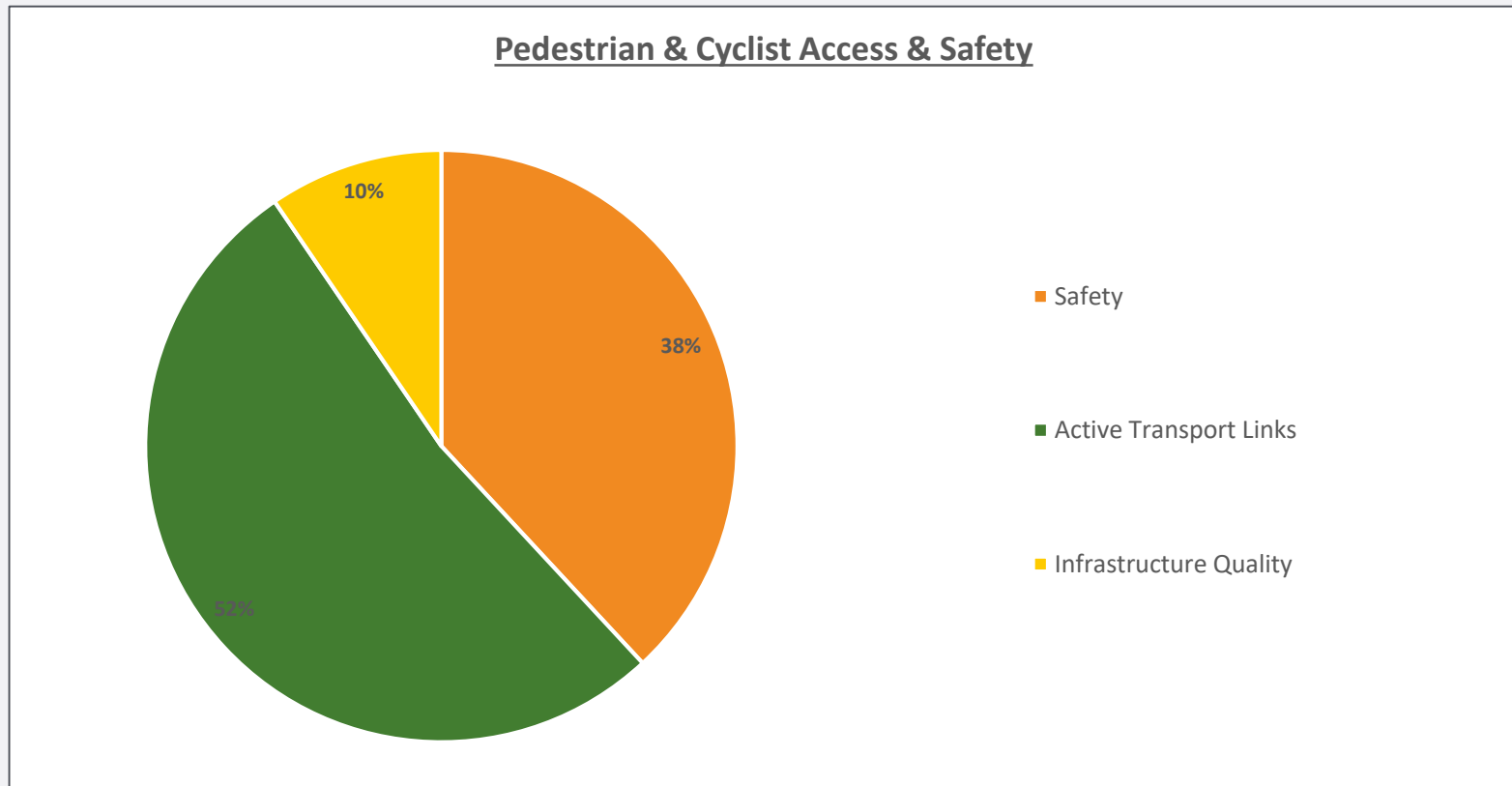
# Community Feedback – Key Themes

- The chart below represents the percentage of responses made for each of the five key themes identified by the community.



# Community Feedback – Pedestrian & Cyclist Access & Safety

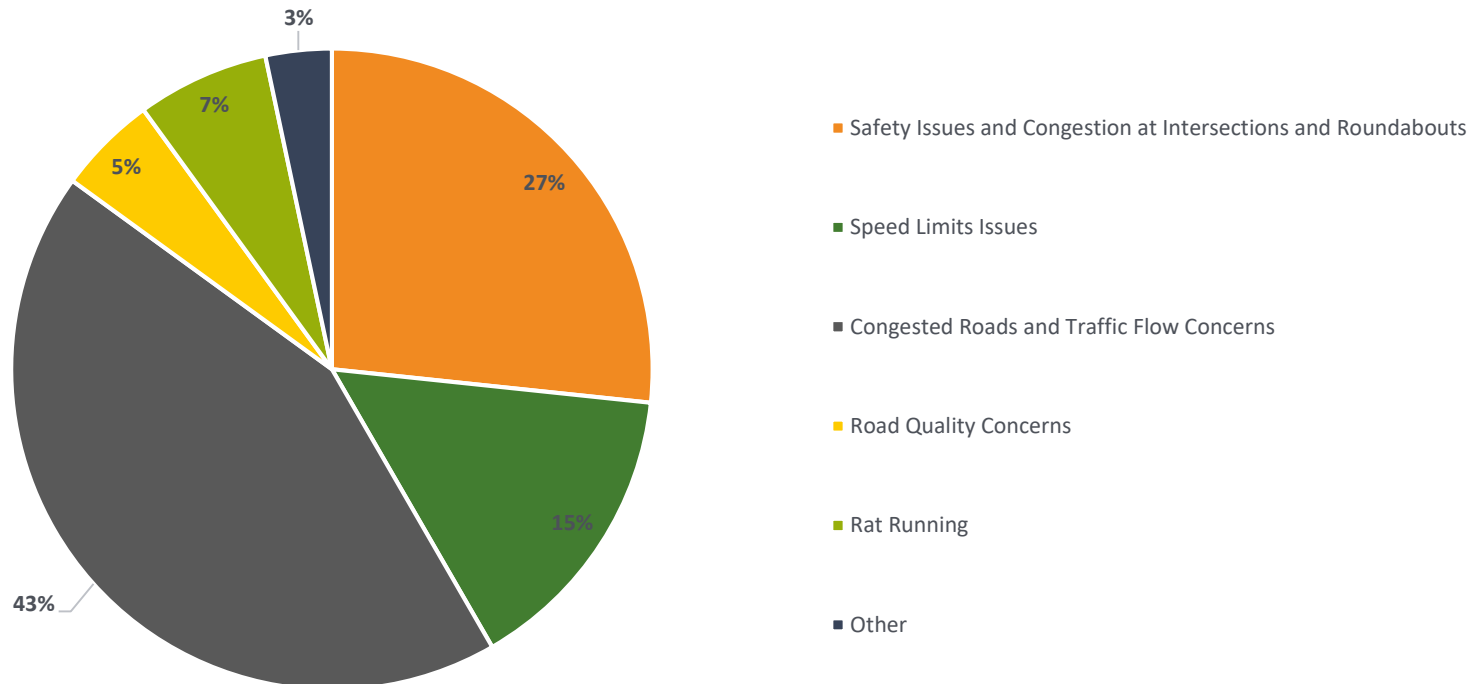
- Pedestrian and Cyclist Access and Safety challenges were the most commonly referenced category raised by the community. Council received 252 responses relating to this challenge category, contributing to 51.3% of all responses.
- Within the Pedestrian and Cyclist Access and Safety category, three main feedback areas emerged as being the centre of the community's concern.



# Community Feedback – Traffic Congestion, Delays & Safety

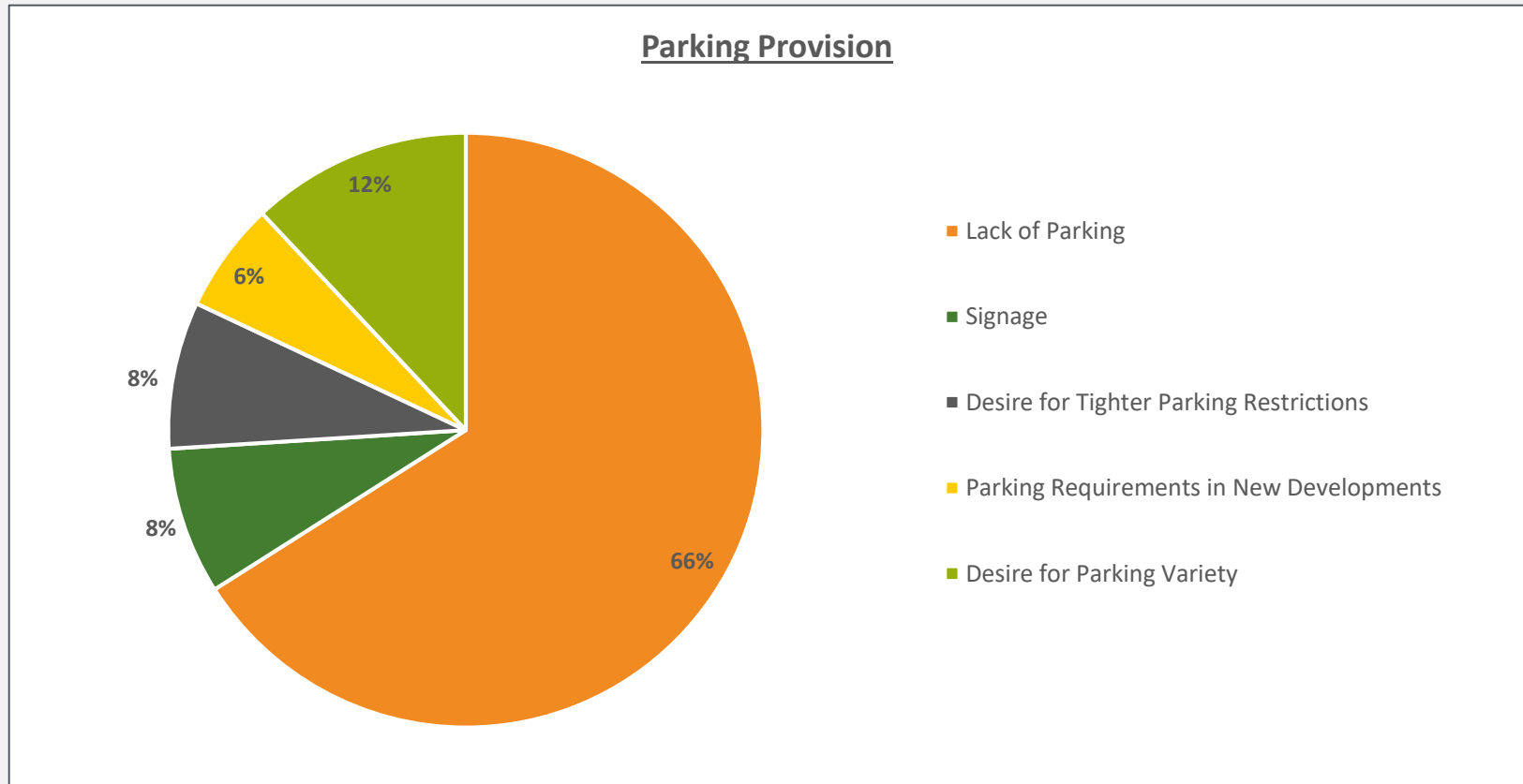
- Traffic congestion, delays and safety challenges were the second most commonly referenced category raised by the community. Council received 182 responses relating to this challenge category, contributing to 37.1% of all responses.
- Within the Traffic Congestion, Delays and Safety category, six main feedback areas emerged as being the centre of the community's concern.

**Traffic Congestion, Delays and Safety Sub-Category Responses**



# Community Feedback – Parking Provision

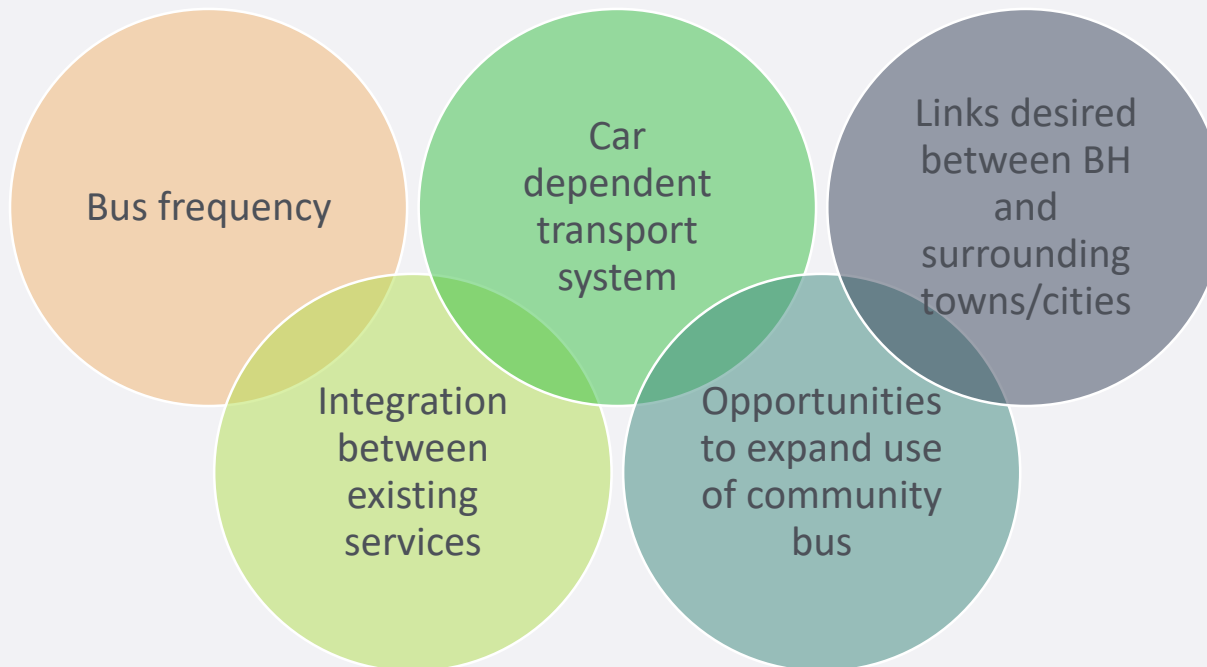
- Parking Provision challenges were the third most commonly referenced category raised by the community. Council received 50 responses relating to this challenge category, contributing to 10.2% of all responses. Within the Parking Provision category, five main feedback areas emerged as being the centre of the community's concern.





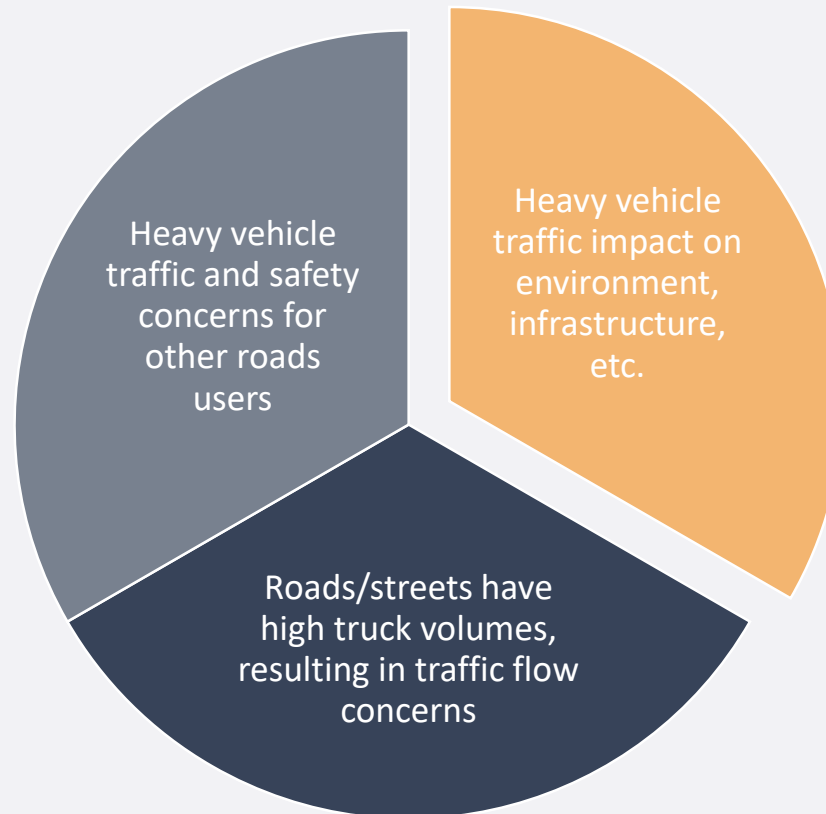
# Community Feedback – Public Transport

- Council received seven responses relating to this challenge category, contributing to only 1.4% of all responses.
- Although there were only 7 responses, each referenced and referred to one, or many, of the following key main themes:



# Community Feedback – High Heavy Vehicle Traffic

- High Heavy Vehicle Traffic challenges were the least mentioned category raised by the community. Council received only two responses relating to this challenge category, contributing to 0.4% of all responses.
- The two responses raised the following concerns:



# Barwon Heads Transport & Parking Study

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Data & Community Engagement Summary

# Project Timeline



## Stage 1 Engagement

Online feedback of opportunities and issues gathered from the community



## Information Collated

All feedback will be assessed and key themes identified



## Stage 2 Engagement

The City will present potential solutions to address issues/opportunities and seek comment from the community

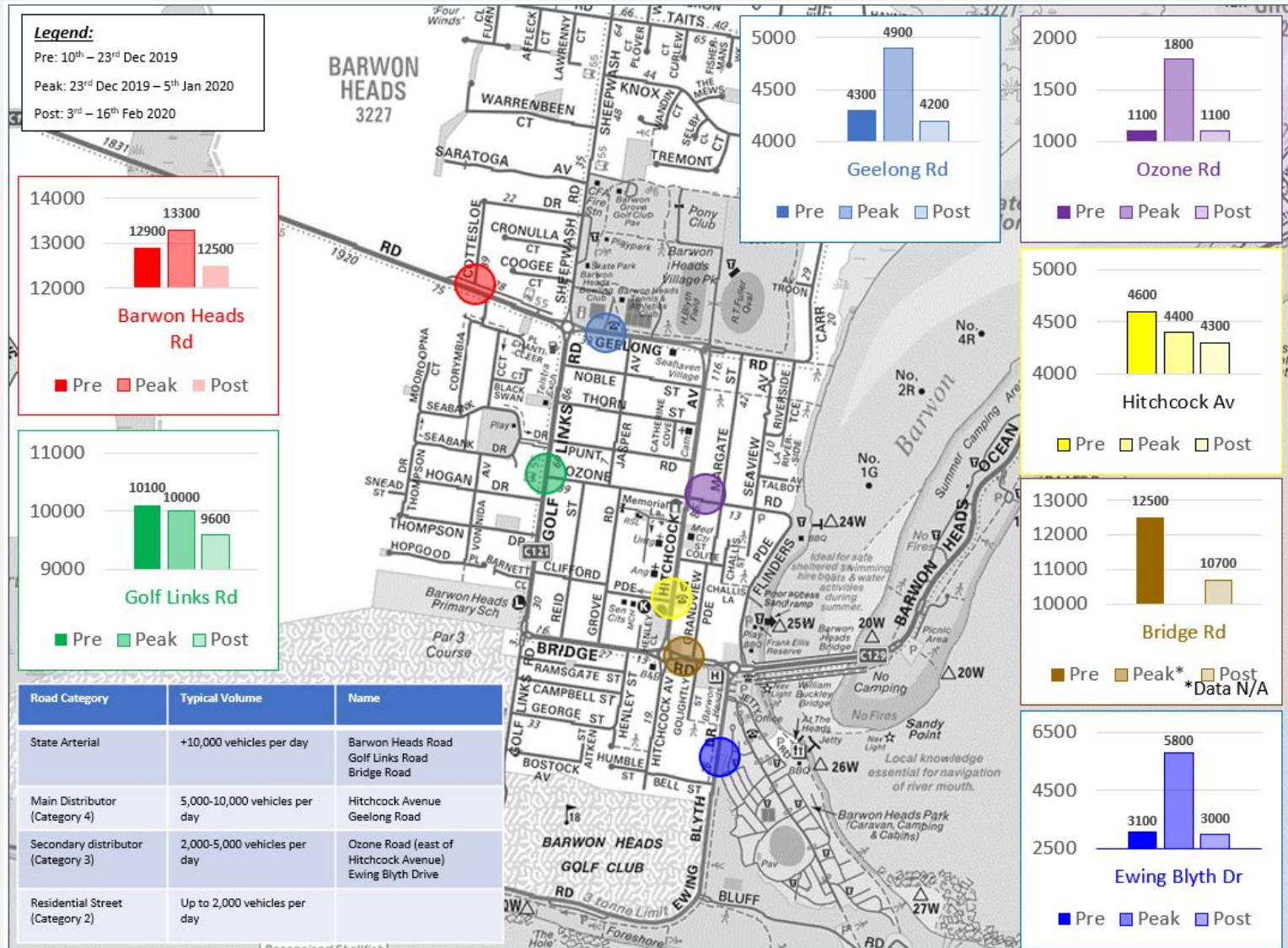


## Barwon Heads Transport & Parking Report finalised

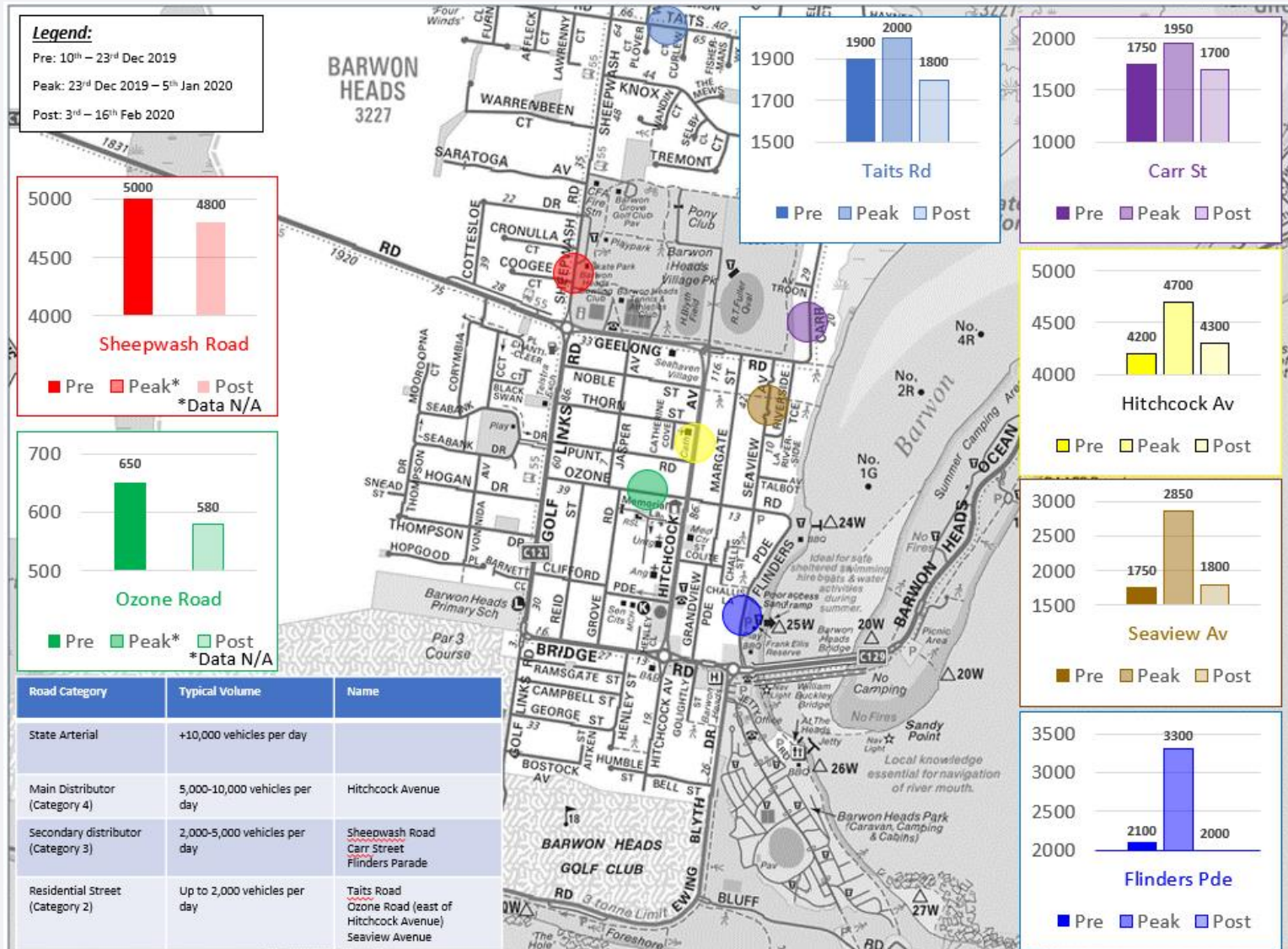
The final report will include recommendations on how to address issues/opportunities that have been agreed upon by the City and the community. Additionally an implementation plan on how to achieve these outcomes and when will be included.



## 1. Peak Day Traffic Volumes Summary

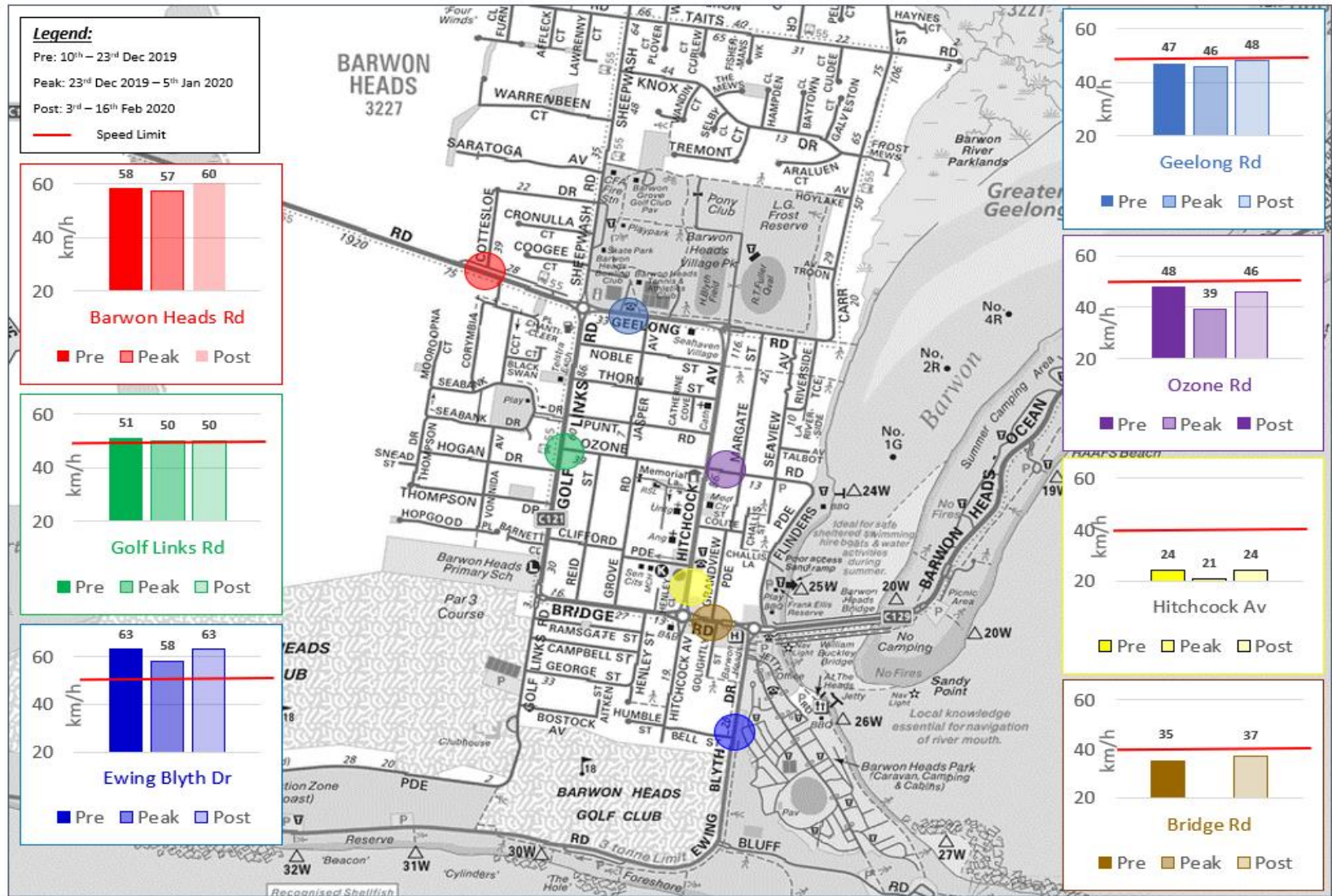


## 1. Peak Day Traffic Volumes Summary

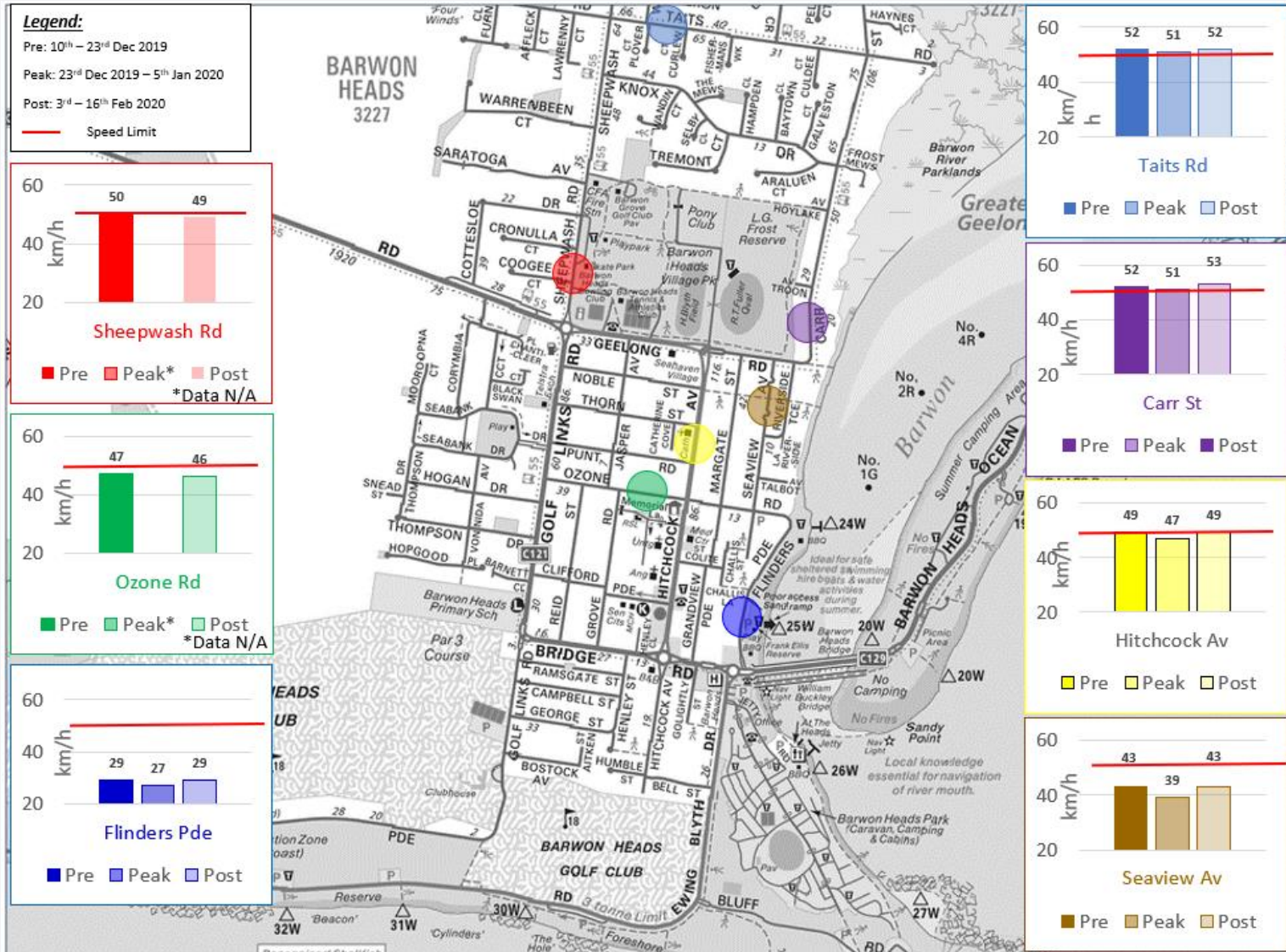




## 2. Typical Vehicle Speeds (85% of all vehicle at or below)

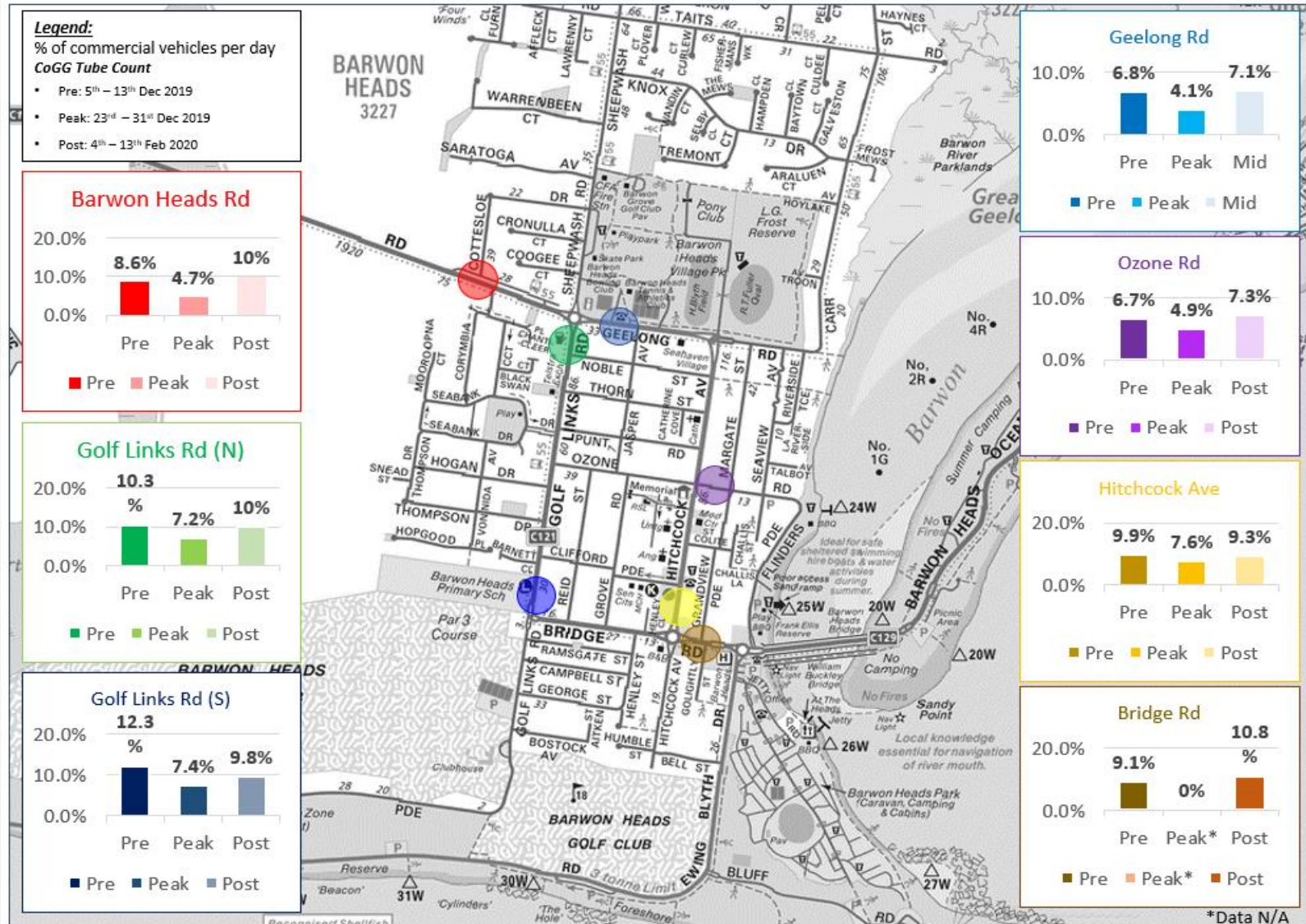


## 2. Typical Vehicle Speeds (85% of all vehicle at or below)



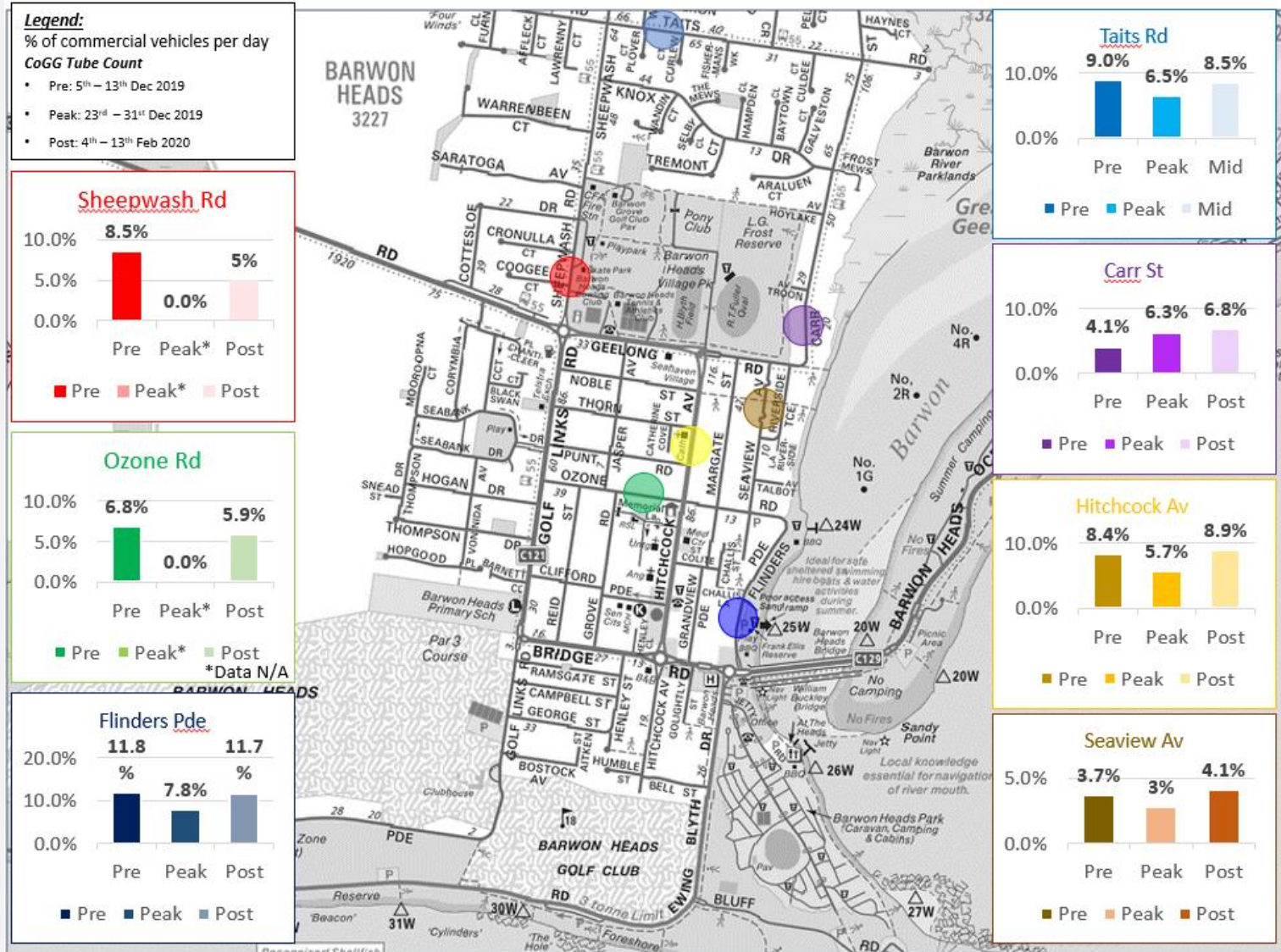


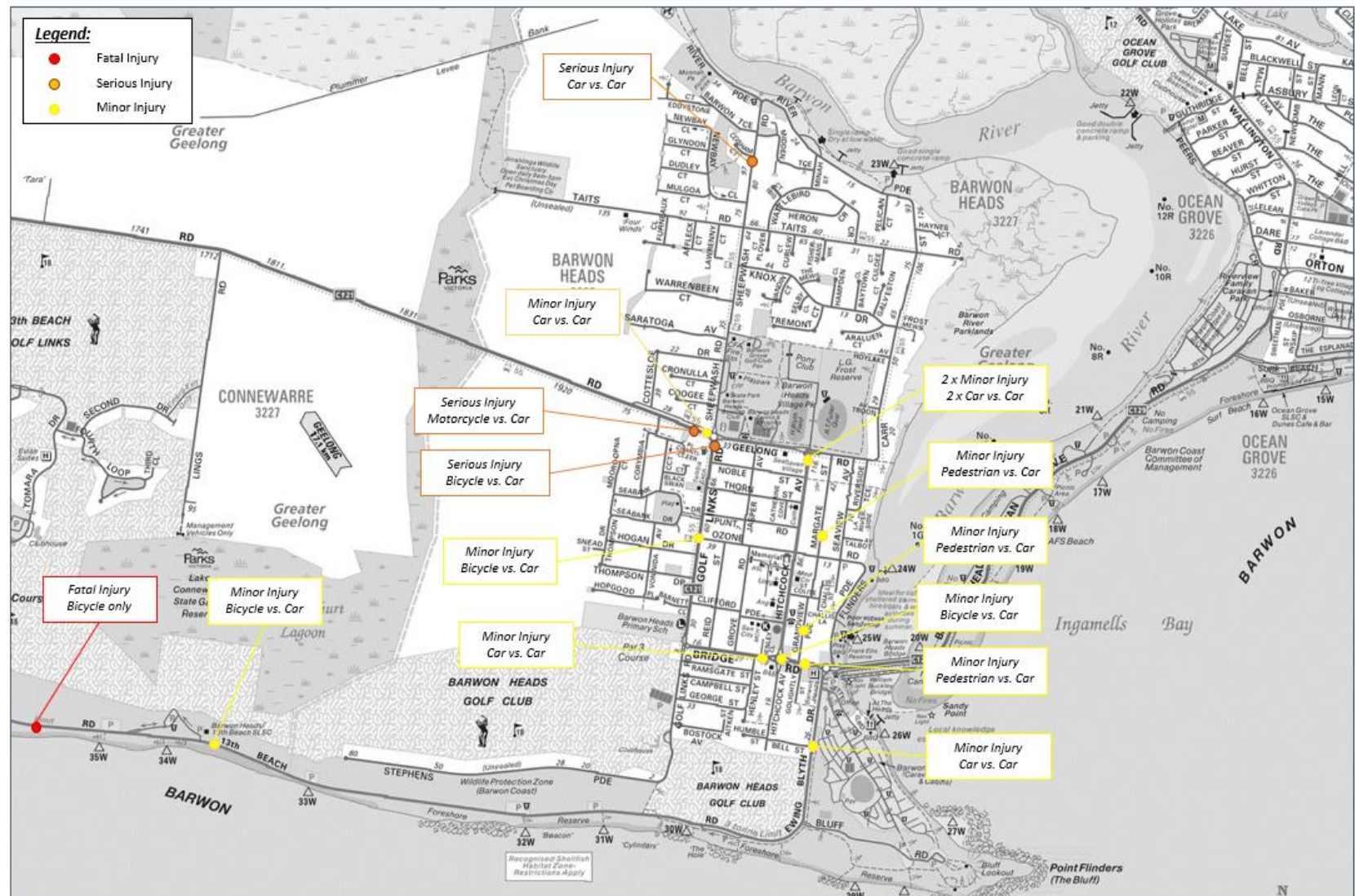
## 3. Average Percentage of Commercial Vehicles per day





## 3. Average Percentage of Commercial Vehicles per day







## 1. Supply

The following on-street and off-street car spaces and parks were included in the car parking survey:

### On-street parking

Ewing Blyth Dr

Bridge Rd

Golf Links Rd

Hitchcock Ave

Clifford Pde

Grove Pde

Ozone Rd

Flinders Pde

Jetty Road

### Off- street parking

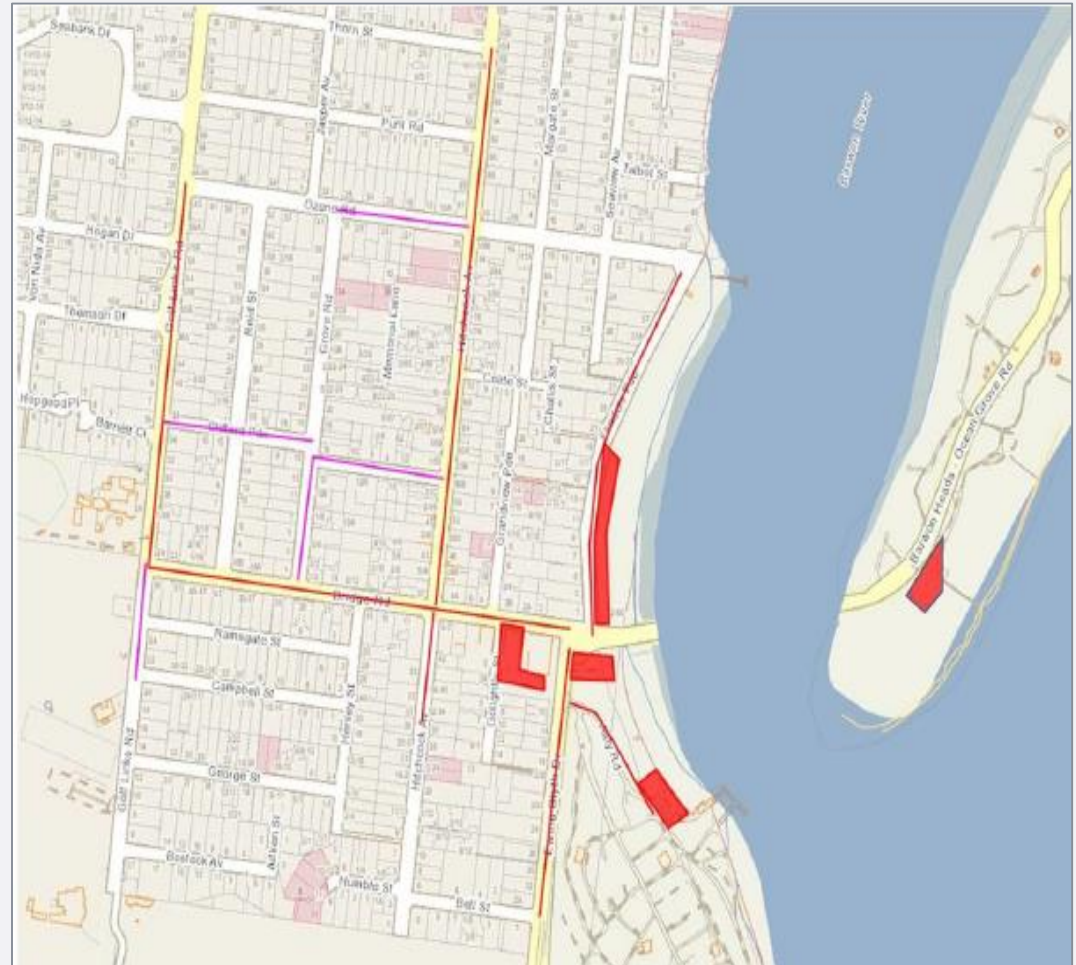
Frank Ellis Reserve

Bridge Car Park

Jetty Rd off-street  
car park

Barwon Heads Hotel  
off-street car park

The Spit off-street  
car park



## 2. Results

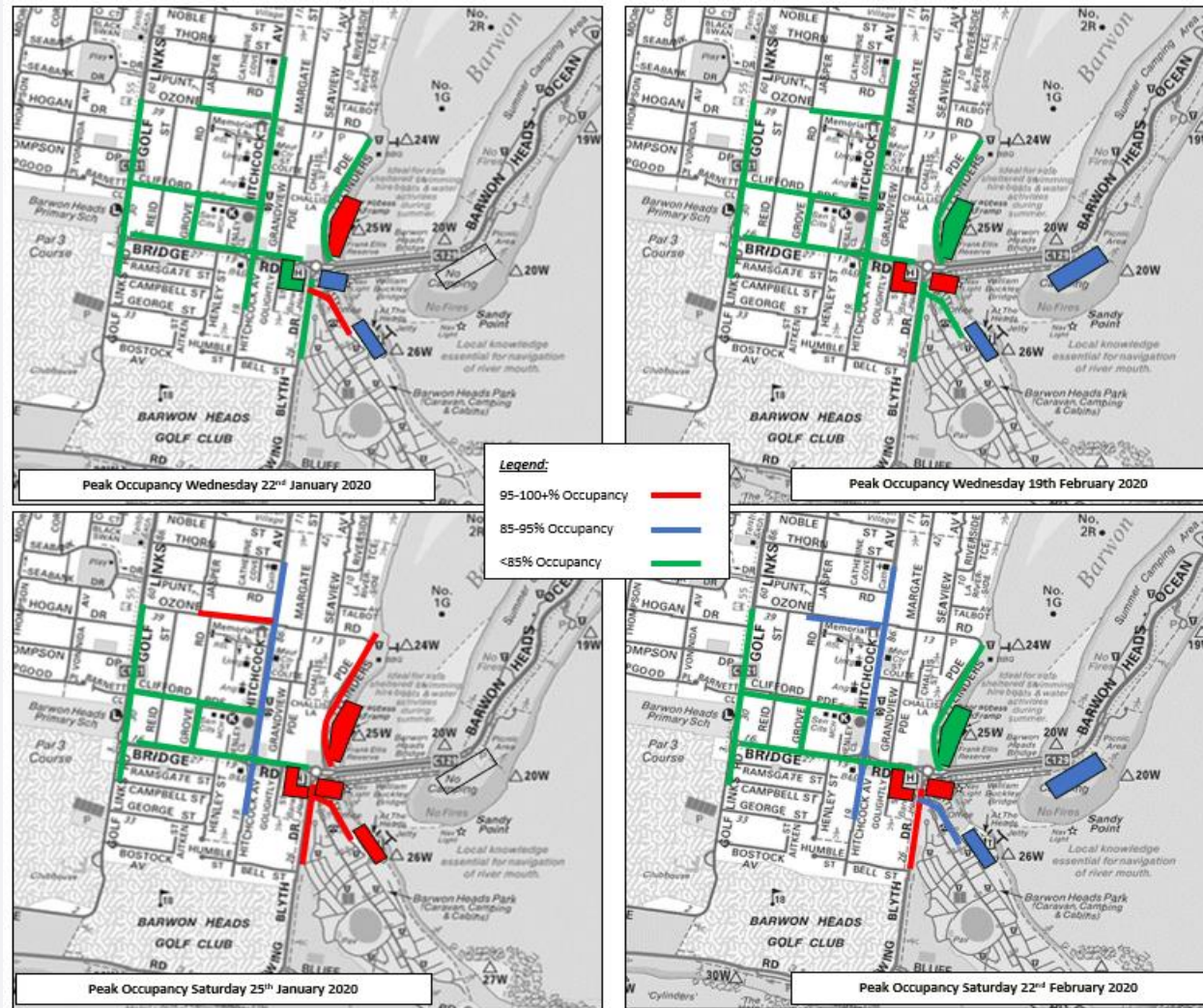
### A. Car parking demand surveys were undertaken at hourly intervals from 7am to 6pm on the following days:

- Wednesday 22<sup>nd</sup> January 2020 (school holiday period);
- Saturday 25<sup>th</sup> January 2020 (school holiday period);
- Wednesday 19<sup>th</sup> February 2020 (non-holiday period); and
- Saturday 22<sup>nd</sup> February 2020 (non-holiday period).

### B. The surveys found peak and average parking demands for the overall surveyed area:

Survey Period	Peak Demand	Average Demand
Wednesday 22 <sup>nd</sup> January 2020	68% (472 spaces)	47% (330 spaces)
Saturday 25 <sup>th</sup> January 2020	83% (577 spaces)	67% (465 spaces)
Wednesday 19 <sup>th</sup> February 2020	49% (365 spaces)	38% (280 spaces)
Saturday 22 <sup>nd</sup> February 2020	66% (489 spaces)	47% (345 spaces)

### C. The absolute peak demand for each survey section is illustrated below:





## 2. Results

At the peak surveyed time of 12 noon on Saturday 25<sup>th</sup> January 2020 (Australia Day Weekend), parking demands and opportunities across the area are summarised below:

Location	Parking Supply	Parking Demand	Occupancy %	No. of Spaces Available
Ewing Blyth Dr	2	2	100%	0
Bridge Rd	72	44	61%	28
Golf Links Rd	75	19	25%	56
Hitchcock Ave	127	120	94%	7
Clifford Pde	52	32	62%	20
Grove Rd	21	15	71%	6
Ozone Rd	29	26	90%	3
Flinders Pde	64	66	103%	-2
Jetty Rd	44	47	107%	-3
Frank Ellis Reserve	65	65	100%	0
Bridge car park	38	36	95%	2
Jetty Rd car park	25	23	92%	2
Barwon Heads Hotel car park	85	82	96%	3
<b>Total Study Area</b>	<b>699</b>	<b>577</b>	<b>83%</b>	<b>122</b>

## 2. Results

At the off peak surveyed time of 12 noon on Wednesday 19<sup>th</sup> February 2020 (park parking on typical school day), parking demands and opportunities across the area are summarised below:

Location	Parking Supply	Parking Demand	Occupancy %	No. of Spaces Available
Ewing Blyth Dr	2	0	0%	2
Bridge Rd	72	14	19%	58
Golf Links Rd	75	18	24%	57
Hitchcock Ave	127	89	70%	38
Clifford Pde	52	28	54%	24
Grove Rd	21	11	52%	11
Ozone Rd	29	10	34%	19
Flinders Pde	64	2	3%	62
Jetty Rd	44	9	20%	35
Frank Ellis Reserve	65	42	65%	23
Bridge car park	38	35	92%	3
Jetty Rd car park	25	23	92%	2
Barwon Heads Hotel car park	85	66	78%	19
The Spit car park	40	18	45%	22
<b>Total Study Area</b>	<b>739</b>	<b>365</b>	<b>49%</b>	<b>374</b>

# Appendix B    Traffic Volume Data

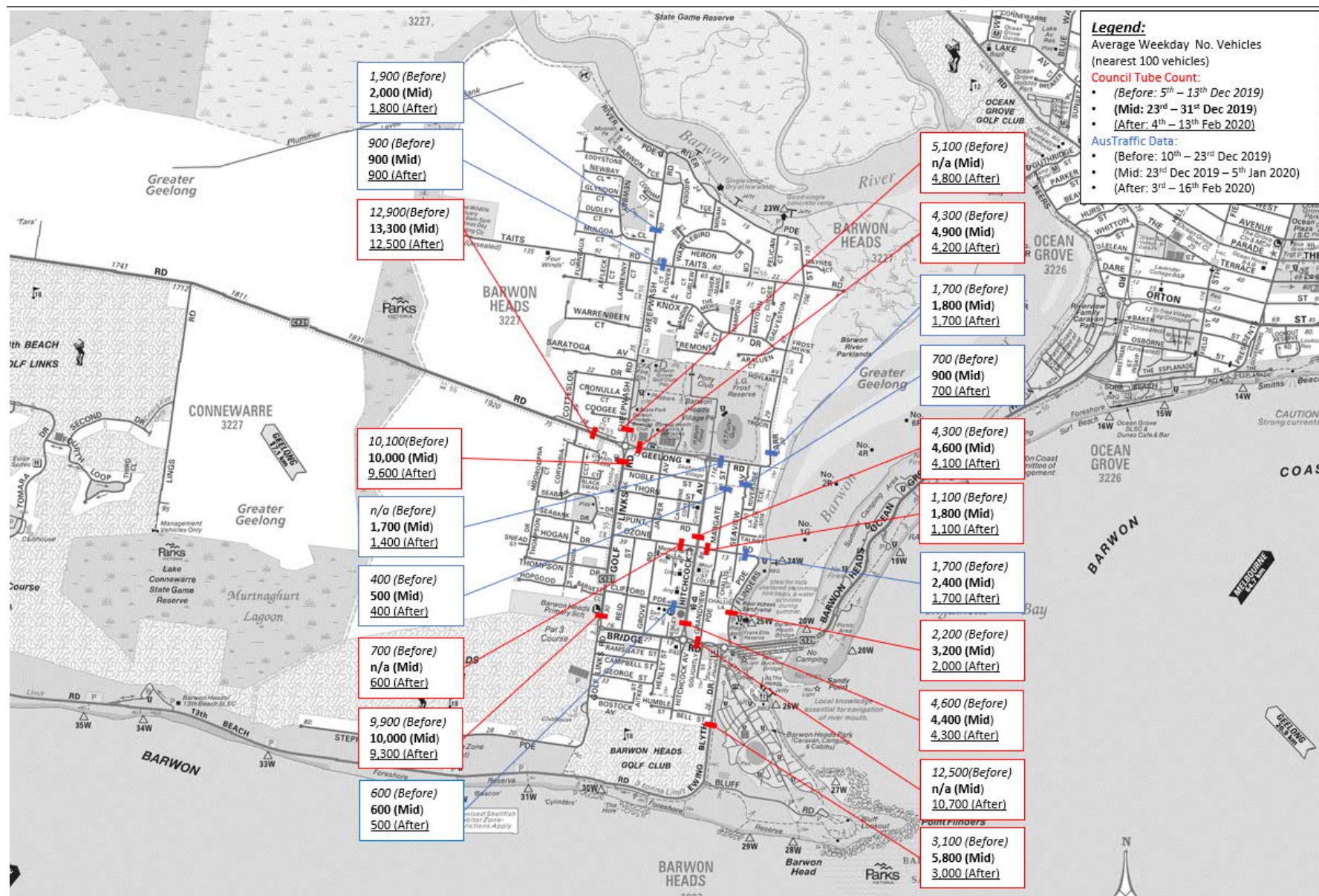


Figure 10-1: Average Weekday Traffic Volumes



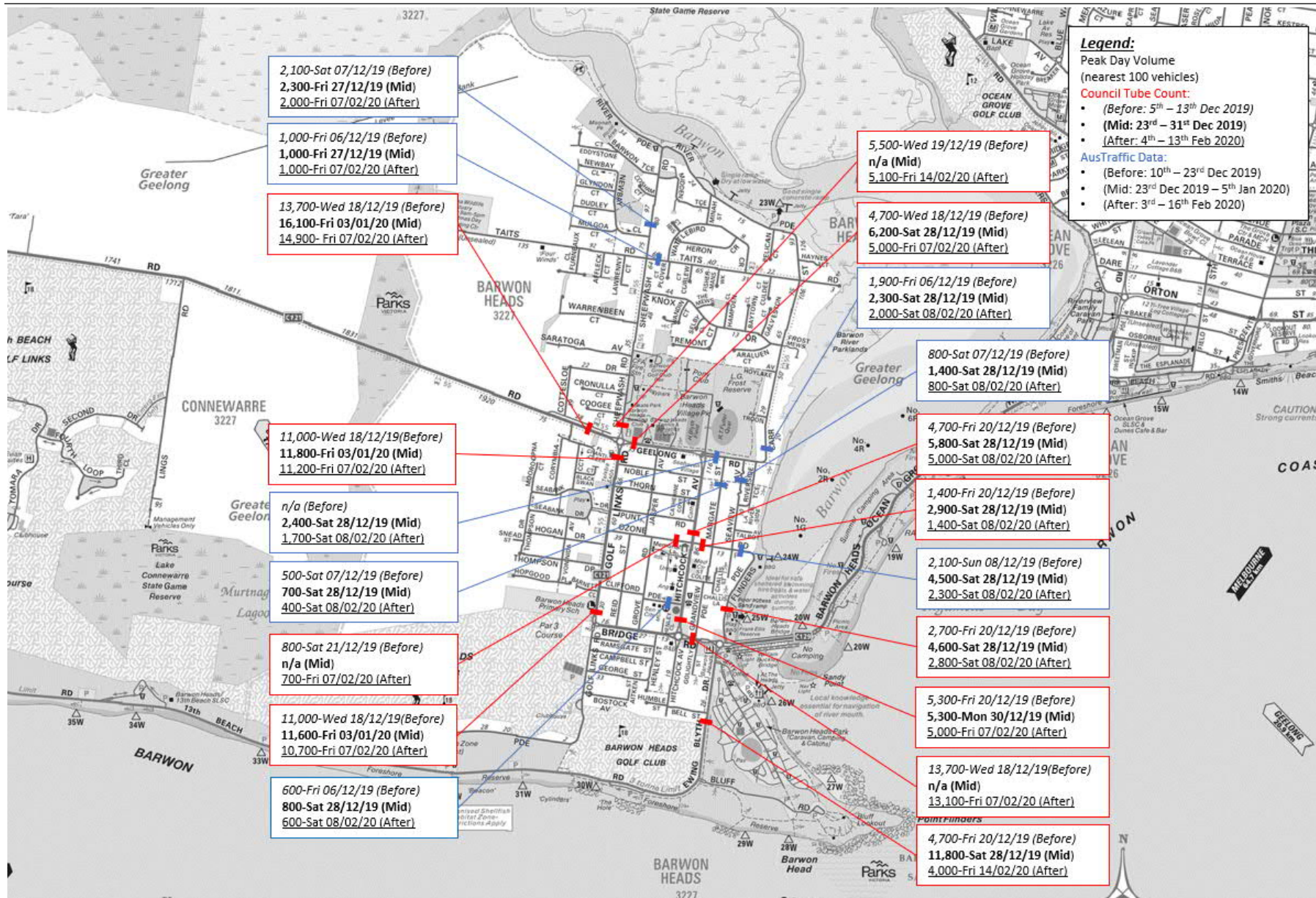


Figure 10-2: Peak Survey Traffic Data



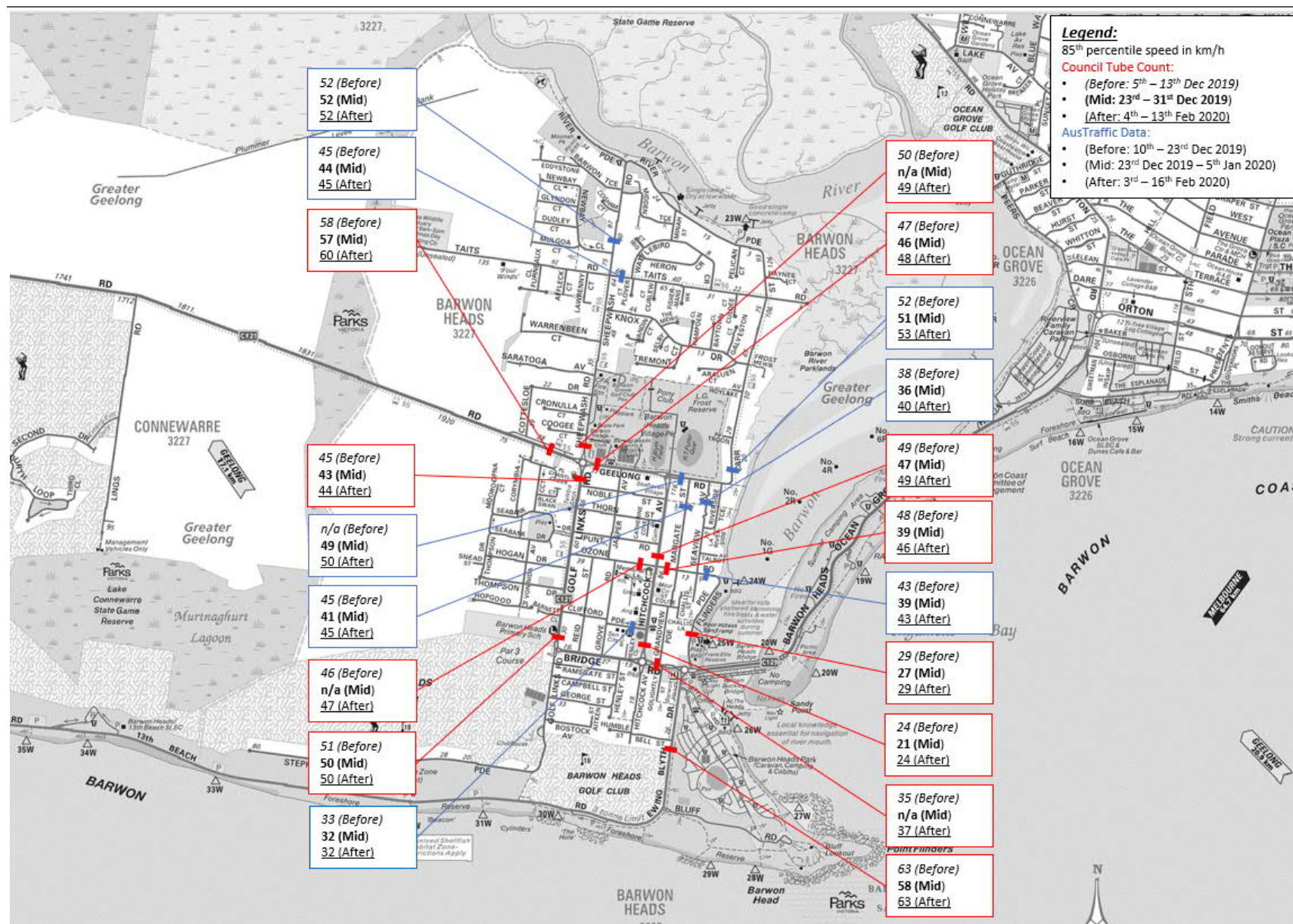


Figure 10-3: 85th Percentile Speed Data



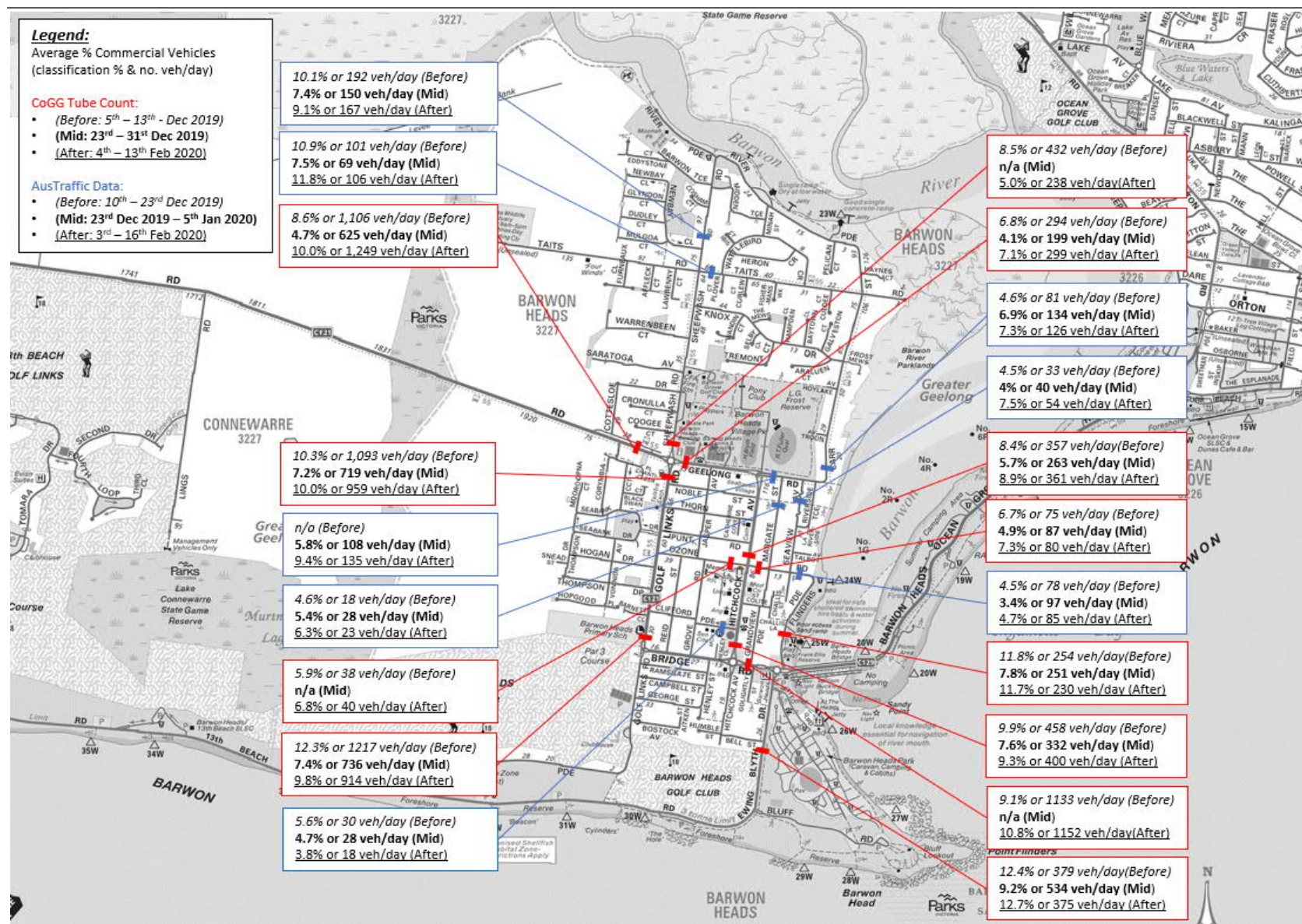


Figure 10-4: Average % Commercial Vehicles Data

## Appendix C    Crash Statistics



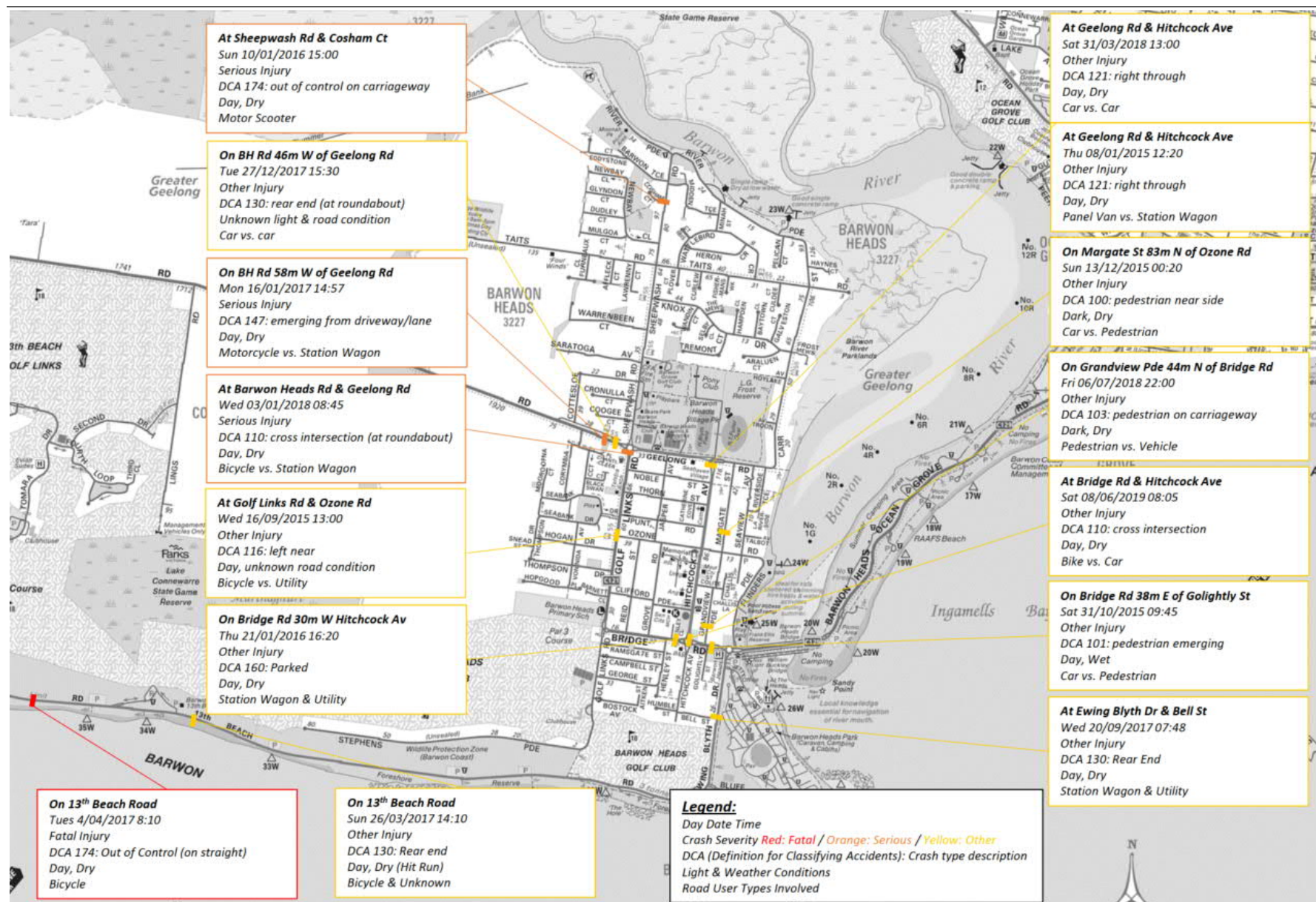


Figure 10-5: Summary of Crashes (5 years: 2015-2019)

## Appendix D Proposed Treatment Concept Plans





1. SHEEPWASH ROAD

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
- Safety concerns with route & connectivity issues based on Barwon Heads Primary School Consultation	- Sheepwash Road has an expected volume of 2,000-5,000 vehicles per day - 1 minor incident involving student and car occurring in the previous 5 years - Traffic volume is 4,700 vehicles per day with 85% travelling at or below a speed of 50km/h on Sheepwash Road	- Provide pedestrian refuge island on Sheepwash Road	- Provides safe crossing options for pedestrians and forms part of the Safe Travel to School Routes - Major link to skate park - Improved crossing options away from Barwon Heads Road

SHEEPWASH ROAD

SARATOGA AVENUE

SHEEPWASH ROAD

POSSIBLE REFUGE ISLAND LOCATION







2. SHEEPWASH ROAD

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
- Safety concerns with route & connectivity issues based on Barwon Heads Primary School Consultation	- Sheepwash Road has an expected volume of 2,000-5,000 vehicles per day - Traffic volume is 4,700 vehicles per day with 85% travelling at or below a speed of 50km/h on Sheepwash Road	- Provide pedestrian refuge island on Sheepwash Road	- Provides safe crossing options for pedestrians and forms part of the Safe Travel to School Routes - Major link to skate park - Improved crossing options away from Barwon Heads Road





3. GEELONG ROAD / HITCHCOCK AVENUE			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- 5 responses about safety and congestion</li><li>- Safety concerns at intersection</li><li>- Signage is confusing and unclear</li></ul>	<ul style="list-style-type: none"><li>- 2 right-through crashes recorded in crash history</li><li>- 85% of drivers travelled at or below a speed of 48km/h on Geelong Road</li><li>- 85% of drivers travelled at or below a speed of 49km/h on Hitchcock Avenue</li></ul>	<ul style="list-style-type: none"><li>- Intersection upgrade to a Modified T</li><li>- New traffic islands, improved linemarking and signage</li></ul>	<ul style="list-style-type: none"><li>- Improves safety at intersection</li><li>- Discourages traffic to use local roads as a shortcut</li><li>- Clear linemarking to show who has right of way</li></ul>







4. HITCHCOCK AVENUE / OZONE ROAD			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- 5 responses about safety and congestion</li><li>- Safety concerns at intersection</li><li>- Concern regarding vehicle speeds</li></ul>	<ul style="list-style-type: none"><li>- Traffic volume on Hitchcock Ave is 4,100 vehicles per day with 85% travelling at or below 47km/hr</li><li>- Traffic volume on Ozone Road is 1,100 vehicles per day with 85% travelling at or below 47km/hr</li></ul>	<ul style="list-style-type: none"><li>- Intersection improvements/upgrades utilising yellow rumble bar islands, as shown in the below photo</li></ul>	<ul style="list-style-type: none"><li>- Improves visibility of give way signage and stops see through effect</li><li>- Reduces vehicle turn speeds</li><li>- Improves pedestrian safety at intersection by highlighting presence of intersection and reducing vehicle approach and turning speeds</li></ul>





5. OZONE ROAD

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Road very narrow</li><li>- No separation between modes / visibility concerns</li><li>- 8 responses regarding congestion &amp; traffic flow concerns</li><li>- 5 responses regarding rat running</li></ul>	<ul style="list-style-type: none"><li>- Removal of parking would assist with congestion, but not supported due to loss of parking spaces and potential to increase speeds</li><li>- Residential streets are designed to carry up to 2000 vehicle per day</li><li>- The traffic volume on Ozone Road is 1,100 vehicles per day with 85% travelling at or below 46km/hr</li><li>- The traffic volume during peak season is 1,900 vehicles per day with 85% of drivers travelling at or below 39km/hr</li></ul>	<ul style="list-style-type: none"><li>- Raised platform intersections at Seaview Ave and Margate St</li></ul>	<ul style="list-style-type: none"><li>- Improves road/pedestrian safety at intersection by reducing the likelihood of rat running</li><li>- Reduce vehicle speeds</li><li>- Discourages through movements</li></ul>





6. BRIDGE ROAD / GOLF LINKS ROAD

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Desire for more parking &amp; 3-4 hour time limits</li><li>- Some portions of footpaths are unsealed</li><li>- 14 responses regarding congestion/traffic flow</li><li>- 54 responses regarding active transport linkage</li><li>- 23 responses regarding active transport safety</li></ul>	<ul style="list-style-type: none"><li>- Data indicates very high active transport demand east/west of Hitchcock Road</li><li>- No opportunity to expand on-street parking opportunities</li></ul>	<ul style="list-style-type: none"><li>- Provide new footpath on north side of Bridge Road, between Grove Road and Golf Links Road, as shown</li></ul>	<ul style="list-style-type: none"><li>- Improves pedestrian safety by completing missing network link</li><li>- Improves pedestrian connectivity for primary route between school and commercial centre</li></ul>





## 7. SEAVIEW AVENUE

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Narrow road</li><li>- Visibility and congestion concerns</li><li>- Popular for rat running</li><li>- Safety concerns as an active transport route to the school</li><li>- Uneven footpath</li></ul>	<ul style="list-style-type: none"><li>- Residential streets are designed to carry up to 2000 vehicle per day</li><li>- Peak traffic volume in Seaview Avenue is 2,860 vehicles per day with 85% travelling at or below 39km/h</li><li>- Off peak traffic volume in Seaview Avenue is 1,800 vehicles per day with 85% travelling at or below 43km/h</li></ul>	<ul style="list-style-type: none"><li>- Chicane treatment matching existing treatment along Seaview Avenue</li></ul>	<ul style="list-style-type: none"><li>- May discourage through traffic and deter 'rat running'</li><li>- Opportunities for landscaping</li><li>- Improves safety for drivers and pedestrians by keeping vehicle speeds low in a local street</li></ul>



8. THIRTEENTH BEACH ROAD			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"> <li>- Speed limit (60km/h) too high</li> <li>- Road quality concerns</li> <li>- Road residential permits</li> <li>- Time-restrictions</li> <li>- More parking</li> <li>- Parking enforcement</li> <li>- Concerns for cyclist safety - limited shoulder</li> <li>- Desire for improved active transport links within and around the Thirteenth Beach Estate</li> </ul>	<ul style="list-style-type: none"> <li>- High demand for improved cycling conditions along Thirteenth Beach Road</li> <li>- High demand for improved/ dedicated active transport connections to 13th Beach precinct from town centre</li> <li>- 2 recorded cyclists crashes in recent history</li> </ul>	<ul style="list-style-type: none"> <li>- Investigate road widening to provide bike lanes / safe passing width, noting potential environmental concerns</li> <li>- Mark parking bays within off street parking areas</li> <li>- Improved wayfinding</li> </ul>	<ul style="list-style-type: none"> <li>- Improve access and safety for cyclists</li> <li>- Improved parking behaviour</li> <li>- Wayfinding signs will ensure pedestrians and cyclists know where paths and key locations are.</li> <li>- Lower speed limit will improve road safety for drivers, cyclists and pedestrians.</li> </ul>

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"> <li>- Speed limit (60km/h) too high</li> <li>- Road quality concerns</li> <li>- Residential permits</li> <li>- Time-restrictions</li> <li>- More parking</li> <li>- Parking enforcement</li> <li>- Concerns for cyclist safety - limited shoulder</li> <li>- Desire for improved active transport links within and around the Thirteenth Beach Estate</li> </ul>	<ul style="list-style-type: none"> <li>- High demand for improved cycling conditions along Thirteenth Beach Road</li> <li>- High demand for improved/ dedicated active transport connections to 13th Beach precinct from town centre</li> <li>- 2 recorded cyclists crashes in recent history</li> </ul>	<ul style="list-style-type: none"> <li>- Investigate road widening to provide bike lanes / safe passing width, noting potential environmental concerns</li> <li>- Mark parking bays within off street parking areas</li> <li>- Improved wayfinding</li> </ul>	<ul style="list-style-type: none"> <li>- Improve access and safety for cyclists</li> <li>- Improved parking behaviour</li> <li>- Wayfinding signs will ensure pedestrians and cyclists know where paths and key locations are.</li> <li>- Lower speed limit will improve road safety for drivers, cyclists and pedestrians.</li> </ul>



Barwon Heads 5km





9. BARWON HEADS AREA

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Desire for more and better-connected active transport links throughout the town.</li><li>- Lake Connewarre and 13th Beach are desired connections</li><li>- Desire for more parking signage</li><li>- 11 responses regarding active transport linkage</li></ul>	<ul style="list-style-type: none"><li>- Community feedback and data indicates that active transport is popular around the Barwon Heads township</li><li>- Data suggests highly popular for active transport (in particular walking/running) along the river trail</li></ul>	<ul style="list-style-type: none"><li>- New/extend existing footpaths and shared paths to Lake Connewarre and 13th Beach as desired connection</li></ul>	<ul style="list-style-type: none"><li>- Expanding the active transport network will provide greater connectivity of the broader Barwon Heads Area</li><li>- Improves safety and access for walking and cycling, and promotes active travel within Barwon Heads</li></ul>

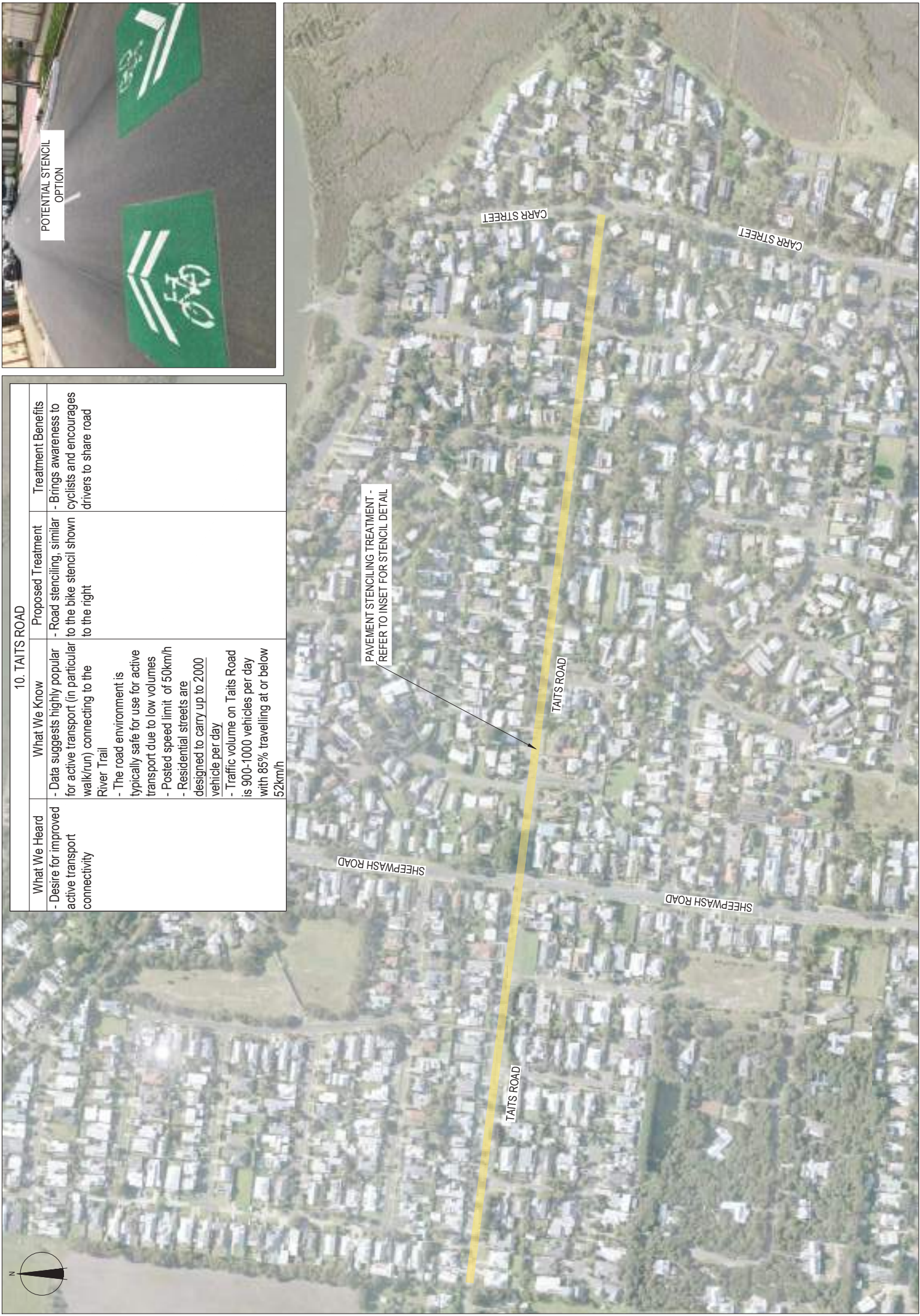




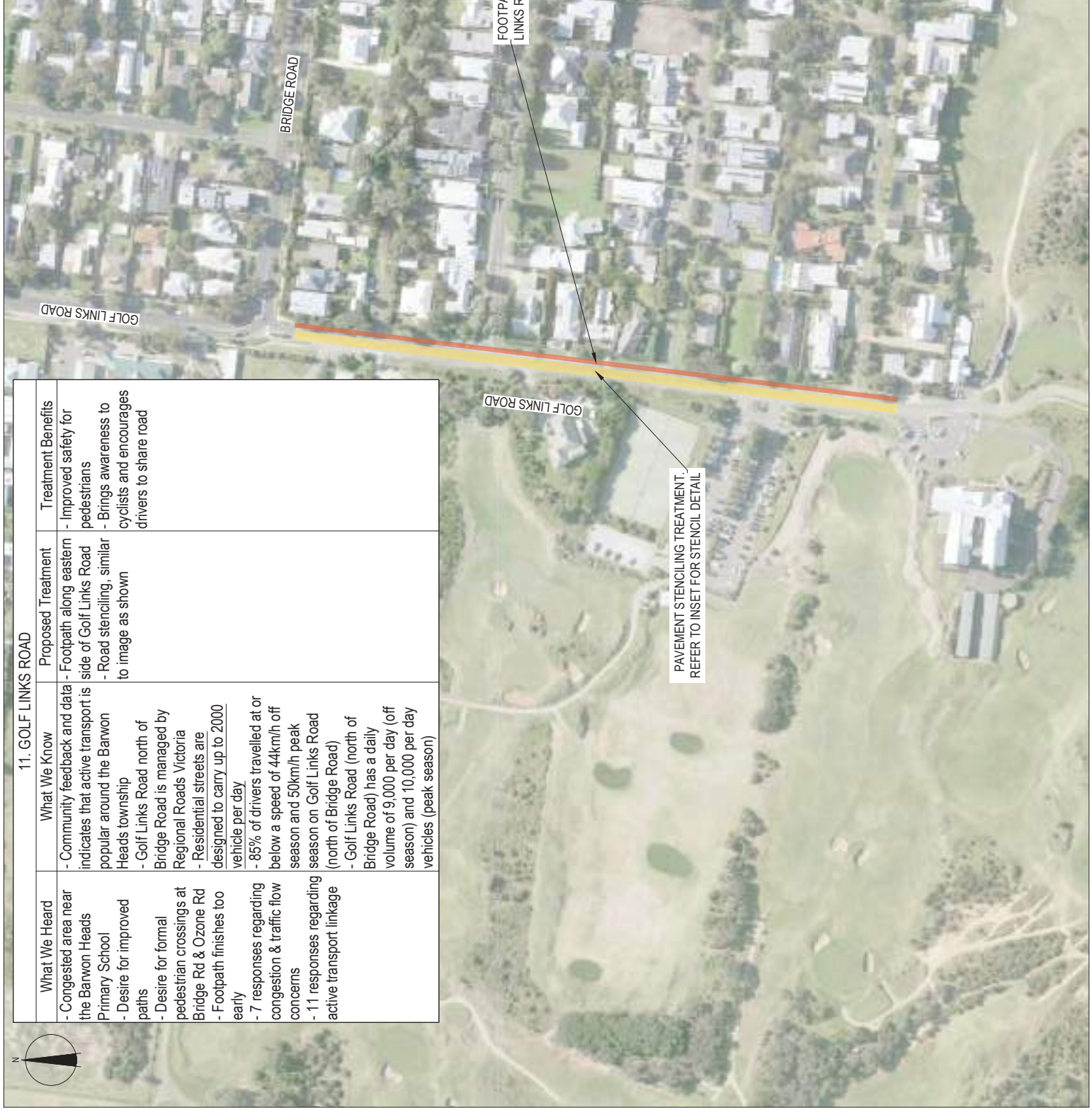


10. TAIT'S ROAD

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
- Desire for improved active transport connectivity	- Data suggests highly popular for active transport (in particular walk/run) connecting to the River Trail - The road environment is typically safe for use for active transport due to low volumes - Posted speed limit of 50km/h - Residential streets are designed to carry up to 2000 vehicle per day - Traffic volume on Tait's Road is 900-1000 vehicles per day with 85% travelling at or below 52km/h	- Road stenciling, similar to the bike stencil shown to the right	- Brings awareness to cyclists and encourages drivers to share road







# 11. GOLF LINKS ROAD

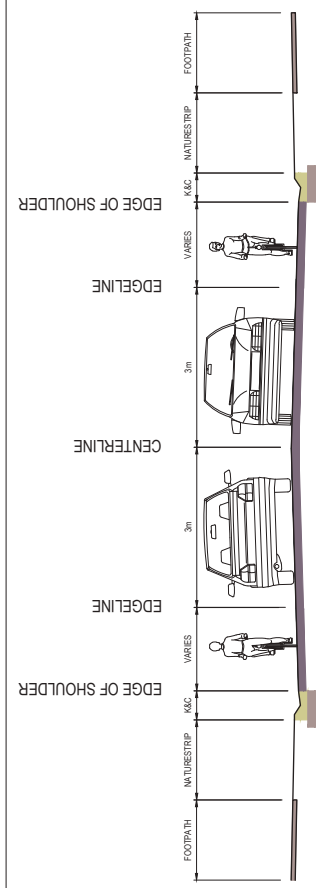
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"> <li>- Congested area near the Barwon Heads Primary School</li> <li>- Desire for improved paths</li> <li>- Desire for formal pedestrian crossings at Bridge Rd &amp; Ozone Rd</li> <li>- Footpath finishes too early</li> <li>- 7 responses regarding congestion &amp; traffic flow concerns</li> <li>- 11 responses regarding active transport linkage</li> </ul>	<ul style="list-style-type: none"> <li>- Community feedback and data indicates that active transport is popular around the Barwon Heads township</li> <li>- Golf Links Road north of Bridge Road is managed by Regional Roads Victoria</li> <li>- Residential streets are designed to carry up to 2000 vehicle per day</li> <li>- 85% of drivers travelled at or below a speed of 44km/h off season and 50km/h peak season on Golf Links Road (north of Bridge Road)</li> <li>- Golf Links Road (north of Bridge Road) has a daily volume of 9,000 per day (off season) and 10,000 per day vehicles (peak season)</li> </ul>	<ul style="list-style-type: none"> <li>- Footpath along eastern side of Golf Links Road</li> <li>- Road stenciling, similar to image as shown</li> </ul>	<ul style="list-style-type: none"> <li>- Improved safety for pedestrians</li> <li>- Brings awareness to cyclists and encourages drivers to share road</li> </ul>



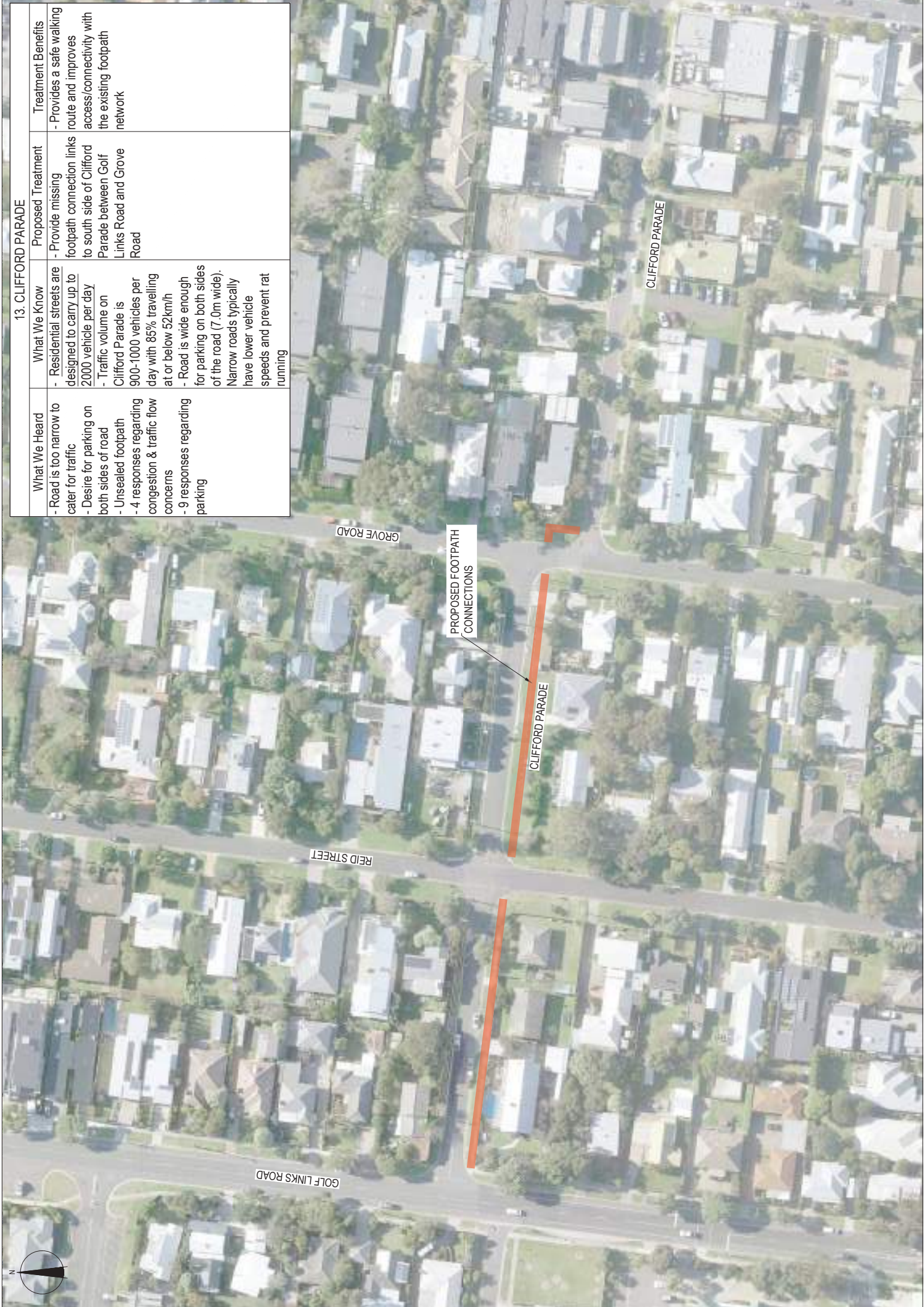


12. BARWON HEADS AREA

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Desire for more and better-connected active transport links throughout the town</li><li>- Desire for more parking signage</li><li>- 11 responses regarding active transport linkage</li></ul>	<ul style="list-style-type: none"><li>- Community feedback and data indicates that active transport is popular along the proposed network with high usage</li></ul>	<p>The Principal Bicycle Network (PBN) is a network of proposed and existing cycle routes that help people cycle for transport, and provide access to major destinations.</p> <ul style="list-style-type: none"><li>- Addition of Sheepwash Road/Carr Street to the PBN</li><li>- Upgrade cross section of Sheepwash Road/Carr Street for formal active transport facilities</li></ul>	<ul style="list-style-type: none"><li>- Providing formal walking and cycling paths improve access and safety for pedestrians and cyclists</li></ul>

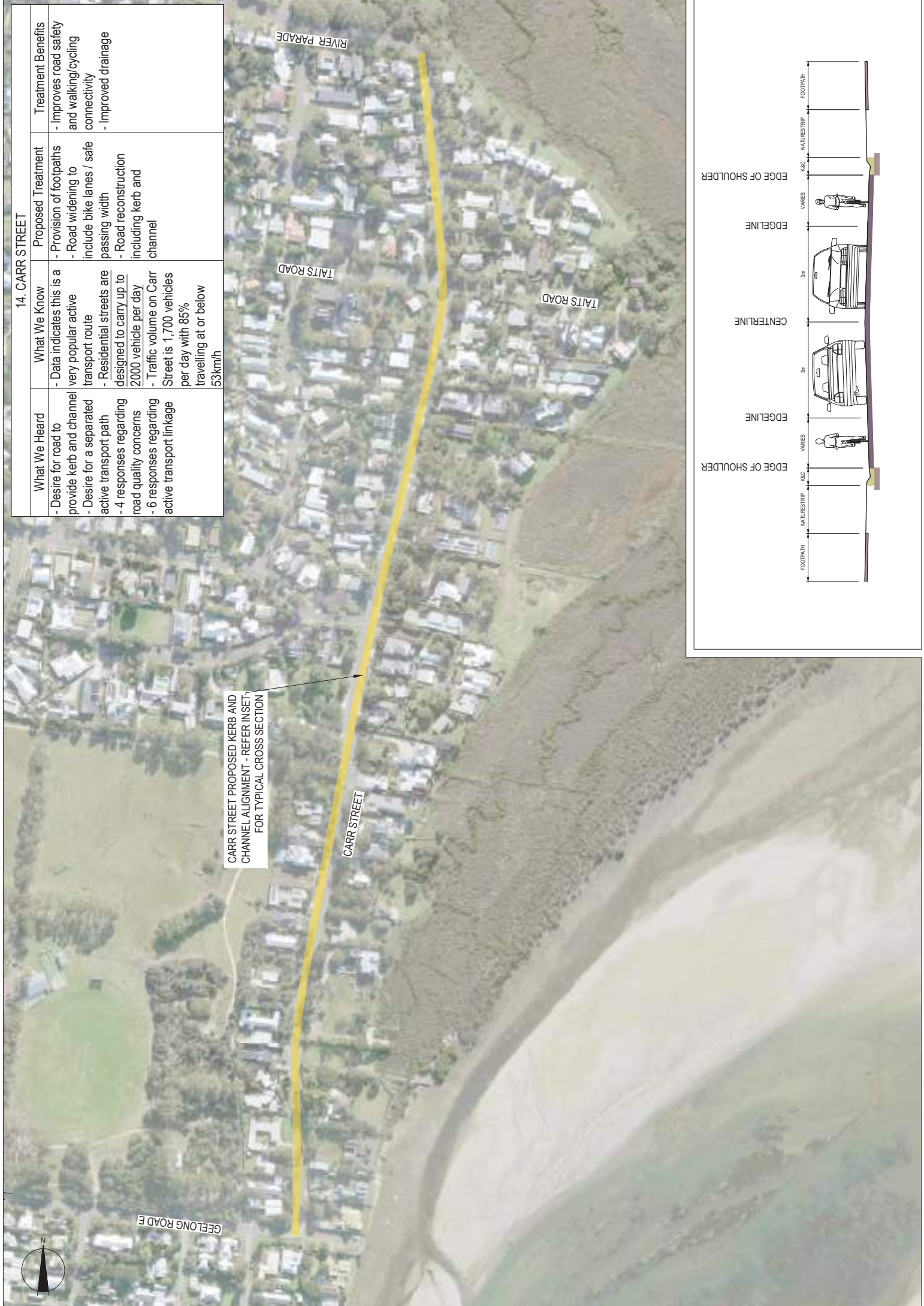






13. CLIFFORD PARADE			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Road is too narrow to cater for traffic</li><li>- Desire for parking on both sides of road</li><li>- Unsealed footpath</li><li>- 4 responses regarding congestion &amp; traffic flow concerns</li><li>- 9 responses regarding parking</li></ul>	<ul style="list-style-type: none"><li>- Residential streets are designed to carry up to 2000 vehicle per day</li><li>- Traffic volume on Clifford Parade is 900-1000 vehicles per day with 85% travelling at or below 52km/h</li><li>- Road is wide enough for parking on both sides of the road (7.0m wide). Narrow roads typically have lower vehicle speeds and prevent rat running</li></ul>	<ul style="list-style-type: none"><li>- Provide missing footpath connection links to south side of Clifford Parade between Golf Links Road and Grove Road</li></ul>	<ul style="list-style-type: none"><li>- Provides a safe walking route and improves access/connectivity with the existing footpath network</li></ul>

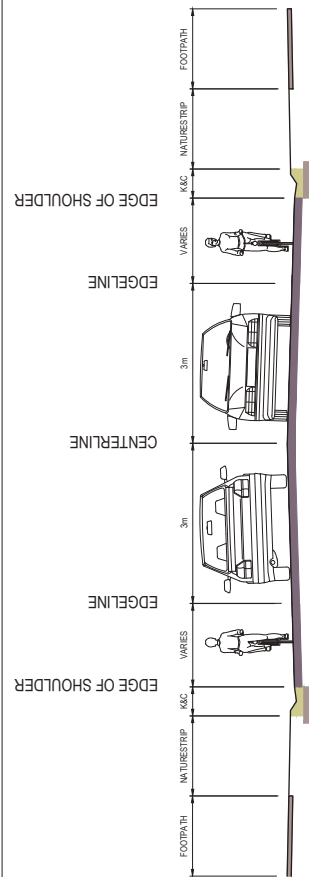




## 14. CARR STREET

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"> <li>- Desire for road to provide kerb and channel</li> <li>- Desire for a separated active transport path</li> <li>- 4 responses regarding road quality concerns</li> <li>- 6 responses regarding active transport linkage</li> </ul>	<ul style="list-style-type: none"> <li>- Data indicates this is a very popular active transport route</li> <li>- Residential streets are designed to carry up to 2000 vehicle per day</li> <li>- Traffic volume on Carr Street is 1,700 vehicles per day with 85% travelling at or below 53km/h</li> </ul>	<ul style="list-style-type: none"> <li>- Provision of footpaths</li> <li>- Road widening to include bike lanes / safe passing width</li> <li>- Road reconstruction including kerb and channel</li> </ul>	<ul style="list-style-type: none"> <li>- Improves road safety and walking/cycling connectivity</li> <li>- Improved drainage</li> </ul>

CARR STREET PROPOSED KERB AND CHANNEL ALIGNMENT - REFER INSET FOR TYPICAL CROSS SECTION

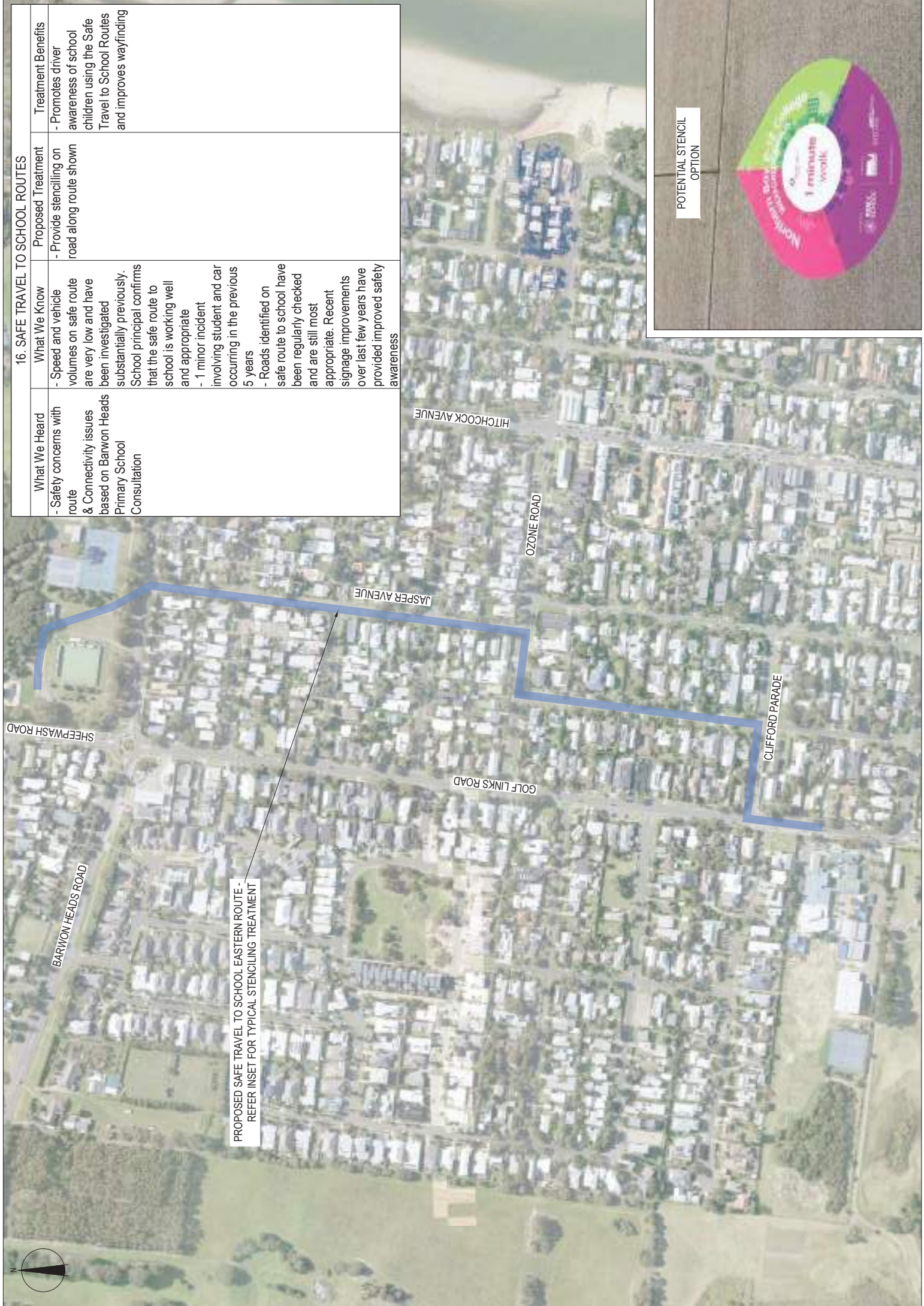






15. STEPHENS PARADE			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Active transport connectivity concerns at the west end of road</li><li>- 8 responses regarding active transport linkage</li></ul>	<ul style="list-style-type: none"><li>- Data shows there is popularity with Stephen Parade as an active transport route – particularly as a pedestrian/running route to Thirteenth Beach Road, the Surf Life Saving Club (SLSC) and 13th Beach Estate</li></ul>	<ul style="list-style-type: none"><li>- Providing formal gravel pathway connection/s to Thirteenth Beach Rd and/or 13th Beach SLSC – and consider additional connections further west</li></ul>	<ul style="list-style-type: none"><li>- New/extended formal paths to promote active transport and provides a safe walking route</li><li>- Improves connectivity</li></ul>





16. SAFE TRAVEL TO SCHOOL ROUTES

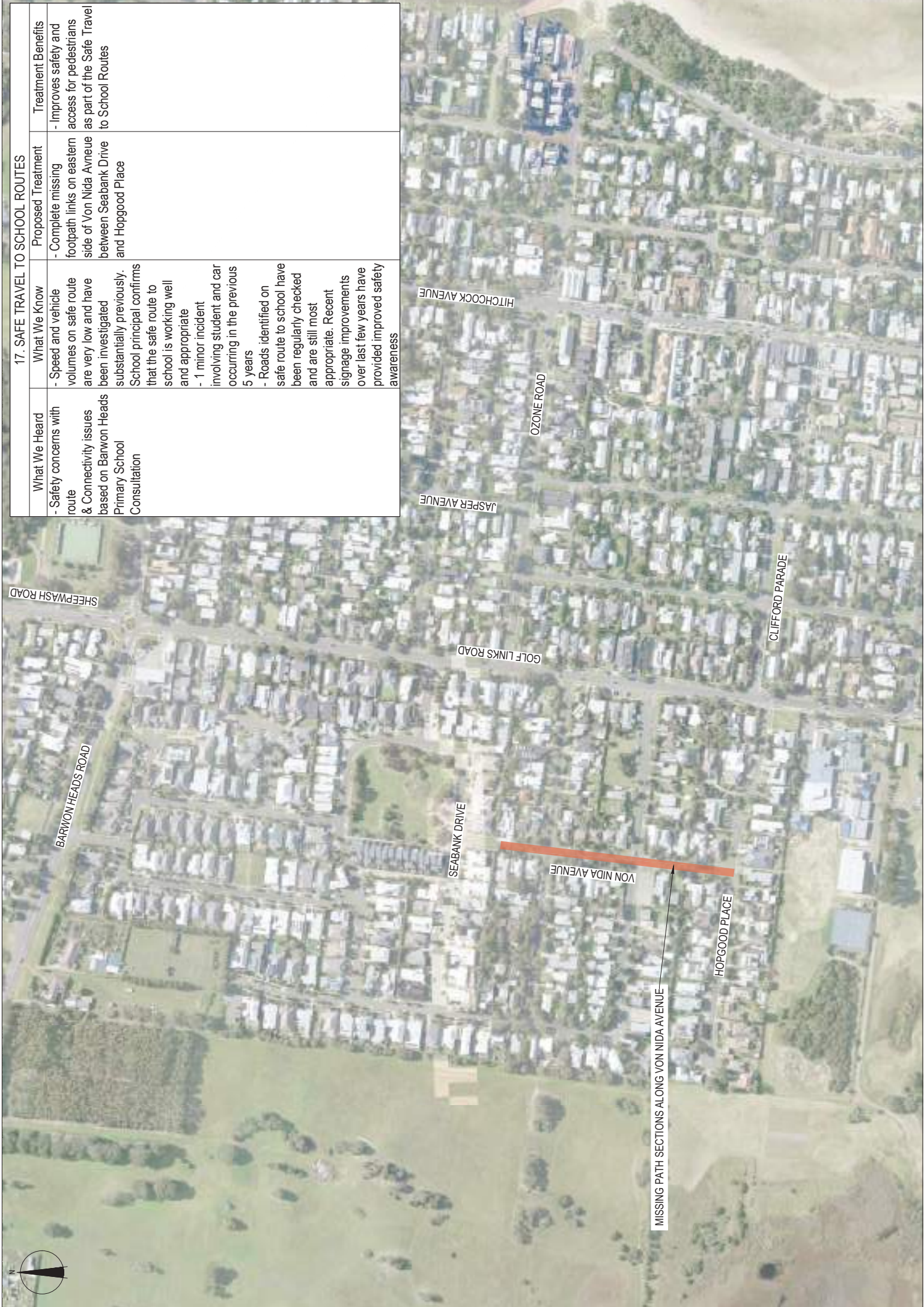
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"><li>- Safety concerns with route</li><li>- Connectivity issues based on Barwon Heads Primary School Consultation</li></ul>	<ul style="list-style-type: none"><li>- Speed and vehicle volumes on safe route are very low and have been investigated substantially previously. School principal confirms that the safe route to school is working well and appropriate</li><li>- 1 minor incident involving student and car occurring in the previous 5 years</li><li>- Roads identified on safe route to school have been regularly checked and are still most appropriate. Recent signage improvements over last few years have provided improved safety awareness</li></ul>	<ul style="list-style-type: none"><li>- Provide stencilling on road along route shown</li></ul>	<ul style="list-style-type: none"><li>- Promotes driver awareness of school children using the Safe Travel to School Routes and improves wayfinding</li></ul>

PROPOSED SAFE TRAVEL TO SCHOOL EASTERN ROUTE - REFER INSET FOR TYPICAL STENCILING TREATMENT

POTENTIAL STENCIL OPTION







17. SAFE TRAVEL TO SCHOOL ROUTES

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<div>- Safety concerns with route &amp; Connectivity issues based on Barwon Heads Primary School Consultation</div>	<div><div>- Speed and vehicle volumes on safe route are very low and have been investigated substantially previously. School principal confirms that the safe route to school is working well and appropriate</div><div>- 1 minor incident involving student and car occurring in the previous 5 years</div><div>- Roads identified on safe route to school have been regularly checked and are still most appropriate. Recent signage improvements over last few years have provided improved safety awareness</div></div>	<div>- Complete missing footpath links on eastern side of Von Nida Avenue between Seabank Drive and Hopgood Place</div>	<div>- Improves safety and access for pedestrians as part of the Safe Travel to School Routes</div>





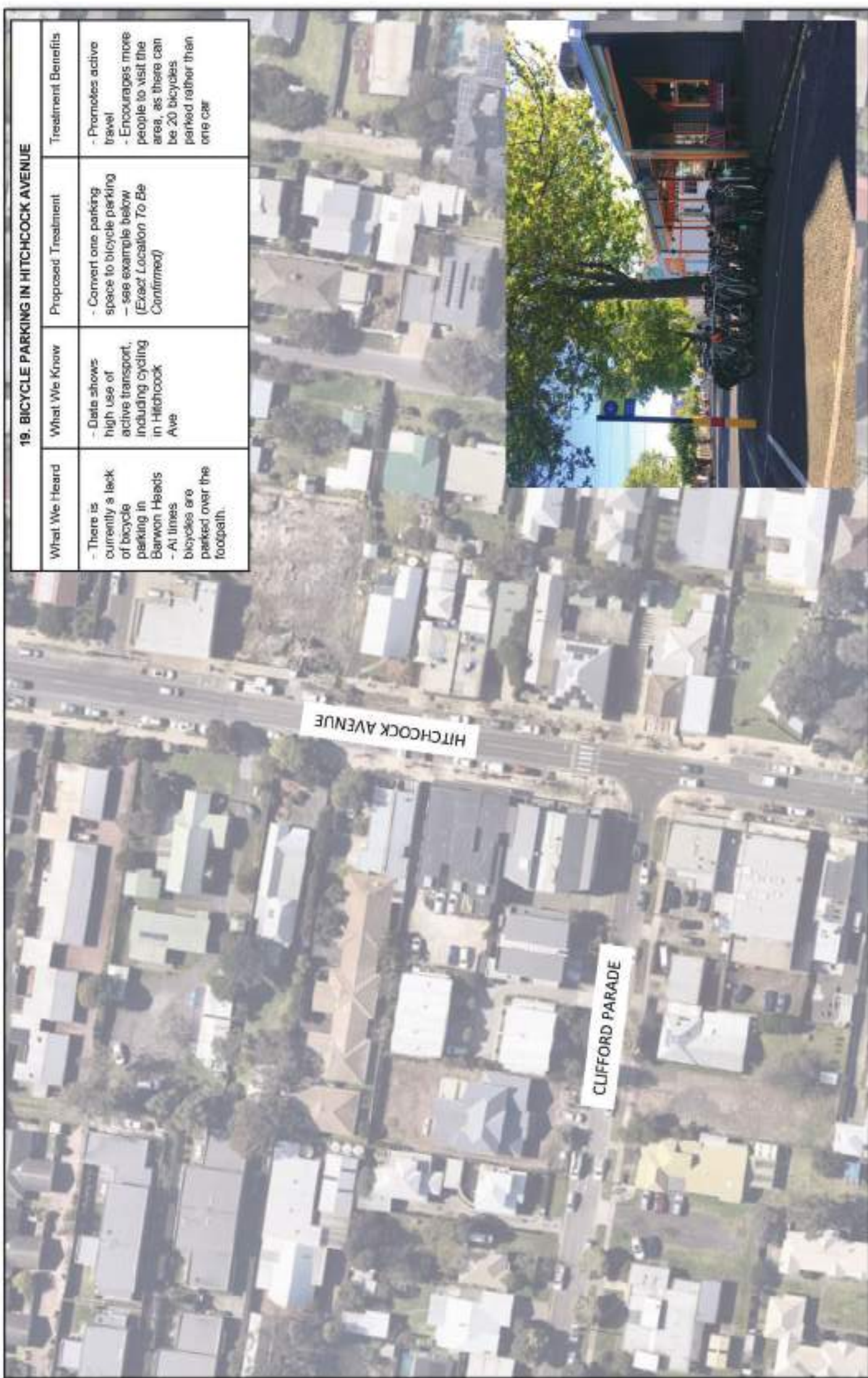
18. BARWON HEADS ROAD / SERVICE ROAD			
What We Heard	What We Know	Proposed Treatment	Treatment Benefits
- Identified by community as an area for safety improvements	- A new childcare development will increase parking and vehicle movements in this area	- Improved linemarking - One-way movement upon entering and exiting service road	- Reduce the risks of accidents occurring from vehicles trying to cross two lanes of traffic to do a left hand turn out of the service road and travel west





# 19. BICYCLE PARKING IN HITCHCOCK AVENUE

What We Heard	What We Know	Proposed Treatment	Treatment Benefits
<ul style="list-style-type: none"> <li>- There is currently a lack of bicycle parking in Barwon Heads</li> <li>- At times bicycles are parked over the footpath.</li> </ul>	<ul style="list-style-type: none"> <li>- Data shows high use of active transport, including cycling in Hitchcock Ave</li> </ul>	<ul style="list-style-type: none"> <li>- Convert one parking space to bicycle parking – see example below (Exact Location To Be Confirmed)</li> </ul>	<ul style="list-style-type: none"> <li>- Promotes active travel</li> <li>- Encourages more people to visit the area, as there can be 20 bicycles parked rather than one car</li> </ul>





## Appendix E      Feedback on Proposed Solutions

# BARWON HEADS TRANSPORT STUDY



## COMMUNITY ENGAGEMENT SUMMARY REPORT (STAGE 2)

On 9 November 2020, the City commenced the second round of engagement for the Barwon Heads Transport and Parking study, to seek the community's feedback on proposed solutions developed.

We sought feedback on 18 proposed solutions to issues raised by the community during stage 1 community engagement.

The proposed solutions include:

- Intersection upgrades
- Traffic calming treatments
- Speed zone changes
- Parking changes
- Active transport links
- Pedestrian safety upgrades

We reviewed all the feedback and received some really valuable comments about the projects. We've used this feedback to develop an implementation plan with some short, medium and long term solutions to address the concerns we heard from the community. In March 2021 we'll again invite the community to provide their feedback on the final report for the study.



**35 DAYS**

of engagement  
(Stage 2)



**984**

Visitors to the project's  
website



**169**

Number of people  
to leave feedback



**4**

print adverts  
in local  
newspapers



**3**

Hard copies  
of surveys  
received

**SOCIAL  
MEDIA**

**22,000**

Reach/Impressions



**1,900**

Actions (Clicks, reactions,  
shares, comments etc.)



**85**

People following  
the project



**4**

Advertising  
pamphlets in  
Barwon Heads  
shopping strip



**1572**

Website views

## Appendix F      Barwon Heads Primary School – Safe Routes to School





<p><b>Barwon Heads Primary School - Safe Routes to School</b></p> <p><b>Red Line</b> - Safe Route - approved walking/riding route to and from school</p> <p><b>Blue Line</b> - Safe Route - approved walking/riding route to and from school</p>	<p><b>Walking and Riding Tips</b></p> <p>Look both ways before crossing any road</p> <p>Walk your bike across Childrens Crossings</p> <p>When riding be respectful of pedestrians and other riders</p>
<p><b>Please Turn Over for Myths and Facts about walking and riding to school</b></p>	



# ARRIVING SAFELY

## THE TRAVEL TO SCHOOL CHALLENGE



### GETTING YOUR CHILD TO SCHOOL SAFELY

All parents want their children to arrive at school safely and on time and most believe the best way is to drive them right to the school gate.

This instead creates hazards for children, as cars travel the street outside the school looking for parking, moving in and out of parking spaces.

Just three decades ago, 70 per cent of children walked or rode to school – now only 30 per cent do.

Many parents have practical reasons for wanting to drive their children to school. We need to look at other reasons and challenge some of these **walking to school** myths.

### WALKING TO SCHOOL MYTHBUSTERS

#### MYTH 1:

### THERE ARE MORE UNSAFE STRANGERS AROUND THE STREETS THESE DAYS

There is no evidence to show that streets are any less safe in terms of 'stranger danger' than they were 30 years ago (Tim Gill: No Fear – Growing up in a risk averse society; 2007). Many dangers may be exaggerated due to ongoing media reports of rare cases of child abduction.

Having more people walking the streets in fact reduces the risk of 'stranger danger' – more eyes on the street make it safer for everyone, and breaks down the 'stranger' barrier.

Children who walk to school get to know neighbouring children, parents and their houses, which can then become unofficial 'safety houses' if ever needed.

#### MYTH 2:

### IT'S SAFER ALL ROUND IF I DRIVE MY CHILDREN TO SCHOOL

It's not! The greater the number of cars driving past the school, stopping to look for a park, reversing into and out of bays, doing u-turns etc, the less safe the school perimeters.

In Victoria 65 per cent of pedestrian accidents involving children occur before and after school **while they and others are being picked up and dropped off by parents.**

Studies show that more pedestrians on the streets make drivers slow down, and so kids walking to school helps to reduce the number and speed of cars. Remember what it looked like outside the school on the recent Walk to School Day?

#### MYTH 3:

### IT'S TOO FAR FOR MY CHILD TO WALK TO SCHOOL

Do you know how far you live from school? – take a look on a map and work out the distance. From the Walking School Bus we know that younger primary school children can walk 250m in five minutes, 500m in ten minutes (the time it takes to get kids in the car and drive them) 750m in 15 minutes and 1km in 20 minutes, and some will happily walk 1.5km in 30 minutes.

If you live further than 1.5km, or if you are on the way to work how about just driving part of the way then walking with your young children to the school? Older children could join a group of friends at a planned meeting place.



#### MYTH 4:

### MY CHILD WOULD BE TOO TIRED IN CLASS IF S/HE WALKED

In a UK survey of 100 teachers, 87 per cent said that children who walk to school seem more awake when getting to class, and 60 per cent said that children are more ready to start class work. This is due to exercise (it is well known that physical activity creates mental energy) and the chance to talk with friends on the way, rather than doing so in class.

A Brisbane study of children walking to school supports this research, with one child saying "Every time I walk to school I get everything right". *Anon, Age 7*

Walking home also allows children some 'head space' between one activity and another.



#### MYTH 5:

### I SAVE TIME DRIVING MY CHILDREN TO AND FROM SCHOOL

By the time you've stopped at lights and signs, driven through 40km/h zones, gone around the block looking for a park...your child could have walked to school, and had a far nicer time than in the back seat of the car!

The time taken for short car trips increases as more children are driven everywhere and traffic becomes worse. The time spent looking for and sitting in a car park could instead be spent walking your child home: "I sit there for twenty-five minutes out the front, because if you don't you miss out on parking spot".

We've heard parents say too that they get 15 minutes or so to themselves in the morning before going to work when their children walk - they miss out on this when driving their children.



# THE TRAVEL TO SCHOOL CHALLENGE

#### MYTH 6:

### I WOULD HAVE TO GET MY CHILD OUT OF BED MUCH EARLIER IF S/HE WALKED

Many children will get ready on time if they know they will see their friends on the way to school. We know of children who were once difficult to get out of bed until they joined a Walking School Bus, and now get their clothes and bags ready the night before so they won't miss walking with their friends.

Organisation is the key – making lunch the night before can help the household move on time in the morning.

#### MYTH 7:

### MY CHILD DOESN'T LIKE WALKING

Are you sure you really know this? In a recent Melbourne survey, over 60 per cent of children said they wanted to walk to school because they get to chat with friends and see things. "Last Monday I walked back from school and I think it's lovely because you see stuff without just zooming past". *Chris, age 10*

Have your children walked with their friends? Or have you walked home with them? Try it! Many parents say that bonding increases when they walk with their children, and they chat in a way that doesn't happen in the car, or when children are at home watching television. They say it's quality time.

Many children do not enjoy being a passenger: "When I walk to school I don't have to sit in the back seat with my annoying brother"

#### MYTH 8:

### DRIVING MY CHILDREN TO SCHOOL SHOWS I'M A 'GOOD' PARENT

Many parents feel trapped into driving their children to school because all the other parents are doing so, thinking that it is safer than walking. However they are actually increasing the risk of a crash involving children who walk.

Social researchers ask whether we can change this belief, so that a 'good' parent is one who allows their child to experience the joy and wonder that comes with walking to school.



#### MYTH (PART-TRUTH) 9:

### MY CHILD HAS NO ROAD SENSE

Children do not 'get' road sense automatically and they can't get it from the back seat of a car. The only way for them to build road safety skills is to practice and to be supervised in traffic when young. This will help them be independent in traffic by about nine years.

Younger children can either walk to school with adults or with older children who have shown they have the skills.

A UK survey of 100 teachers (see Myth 3) showed that 93 per cent believe that walking to school makes children more aware of road safety issues.

"When I was walking I learnt a new rule: it was that you don't run across the road...you can only walk fast" *Ines, age 6*

#### MYTH (PART-TRUTH) 10:

### MY CHILD WOULD GET LOST

Children do need to practise getting to and from home, just as they need to practise road skills. As they walk and explore they build a mental map of their 'home territory' and this helps them feel part of their environment and community.

As passengers, children have no need to find their way or think about a road situation and are likely to have a poorer understanding of their local area.

This is shown in a UK study where maps drawn by children who walk around their neighbourhoods were found to be more correct in terms of landmarks and direction than those of children who travel the same places in cars.

These navigation skills are needed for children to become confident and independent travellers.

"I walked a different way home so I could have a different adventure". *Rahul, age 8*

In another recent study in Victoria, 50 children were loaned a camera to record a week of their lives showing places they went and things they did. More than half the children included photos from the back seat of the car.

Childrens quotes from "Eight Reasons Kids Reckon They Should Walk To School" by David Engwicht

### NOT A MYTH, BUT A NEW REALITY...THE "BUBBLEWRAP GENERATION"

This name for children today (Karen Malone, University of Wollongong) refers to their overprotection and the restricting of their movements. These children lack skills in working out hazards in their environment, putting them at greater risk of becoming a target for the dangers that parents want to protect them from.

Travelling without adults helps children develop a sense of control, independence and confidence in making their way around their own world.

"Letting go" is challenging but can be managed in stages, when you believe you've taught your child the skills they need. One local parent says about her daughter being allowed to cycle to school: "she is happier that I believe in her... she sees that I believe in her".

### HOW TO LET YOUR CHILDREN WALK TO SCHOOL SAFELY

For some of the above myths we've offered solutions - here they are again:

- talk with other parents in your street/ neighbourhood about taking turns to walk with each other's young children to/from school.
- develop buddy groups of older children who can walk together without adults.
- drive just part of the way to school and drop your children 500m away so they can walk the remainder - or walk with them that distance.
- pack bags and make lunches the night before, to maximise walking time in the morning.
- teach your children road safety and navigation skills by walking with them around the neighbourhood – practice on weekends when roads are quieter and you have more time.

**If we have more children walking and cycling to school than being driven as we had just a couple of decades ago, the streets will be safer for those children and the community in general.**

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