St Patrick's College, Strathfield Green Travel Plan

Prepared for:

Urbis Pty Ltd

19 March 2020

The Transport Planning Partnership

St Patrick's College, Strathfield Green Travel Plan

Client: Urbis Pty Ltd

Version: Final V01

Date: 19 March 2020

TTPP Reference: 19235

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
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A. TRANSPORT ACCESS GUIDE

1 Introduction

1.1 Background

The Transport Planning Partnership (TTPP) has prepared this Green Travel Plan (GTP) on behalf of Urbis Pty Ltd (Urbis) to accompany a State Significant Development (SSD) application for the proposed development at St Patrick's College, Strathfield (the site). The site is located at No. 1 & 2 Edgar Street, Strathfield.

The proposal comprises a new Science and Learning Building (STEMM) with a basement parking level accommodating 59 car parking spaces. The works proposed as part of this SSD application are:

- Demolition of five existing tennis courts;

- Construction of a new four-storey STEMM building including an associated basement car park, 2 x rooftop tennis courts, 2 x outdoor tennis courts; and

- New landscaped civic space associated with the College.

The SSD application will also seek to increase the current student population allowing strategic planning certainty for the College and responding to the demands in providing quality Catholic education in the region.

It is proposed to progressively increase the student population of the College to a maximum of 1,790 by the year 2028. This is based on a 10-year forecast for the College, which seeks to add an new stream of 30 students per year until there are seven streams in each year group. The 1,790 student population target also incorporates a buffer allowing for future variances to this forecast.

1.2 Role of a Green Travel Plan

The purpose of a GTP relating to an educational facility is to encapsulate a strategy for managing travel demand that embraces the principles of sustainable transport whilst recognising the unique context of travel planning for a school. In its simplest form, this GTP encourages travel to and from the school campus using transport modes that have low environmental impacts, for example active transport modes including walking, cycling, public transport, and encourages better management of car use.

Active transport presents a number of interrelated benefits including:

- improved personal health benefits

- reduced traffic congestion, noise and air pollution caused by motor vehicles

- greater social connections within communities, and

- cost savings to the economy and individual.

As assessed in the Transport Impact Assessment as part of the SSD Application, it is estimated that the proposed development would generate in the order of 151 car trips in the AM school peak period and 115 car trips in the PM school peak periods. Managing travel demand in favour of sustainable modes is challenging but would be critical particularly when considering the future development of St Patrick's College.

1.3 Drivers of the Travel Plan

There are a number of social, environmental and economic drivers for developing and implementing a GTP for developments as detailed below.

1.3.1 Car parking

Car parks on campus utilise valuable land resources and impact campus amenity. If the campus continues to grow and there is no modal shift towards non-car transport modes, the car parking demand could increase into the future.

1.3.2 Environmental Impacts

The transport sector (road, rail, air and ship) is Australia's third largest source of greenhouse gas emissions (GHG), accounting for 18% of emissions in Australia in 2015 (Climate Council of Australia, 2016). Mitigating this impact is a key driver of the GTP. Within Australia, the transport sector has the highest rate of growth of GHG emissions per year having risen by 51% since 1990 with private vehicles responsible for almost half of transport emissions. In comparison, travel modes such as walking and cycling have the lowest emissions while public transportation has significantly lower impact than private vehicles.

1.3.3 Health Benefits

Use of sustainable transport modes can have wide-ranging health benefits due to a corresponding reduction in greenhouse gas emissions and increase in physical activity from walking and cycling. The shift from private cars to sustainable transport "can yield much greater immediate health "co-benefits" than improving fuel and vehicle efficiencies" (World Health Organisation, 2011). The potential benefits can include reduced respiratory diseases from better air quality, prevention of heart disease, some cancers, type 2 diabetes and some obesity-related risks.

1.3.4 Social Equity

Transport has a fundamental role in supporting social equity, that is the equitable distribution of services, amenities and opportunities. The provision of sustainable transport modes can provide a more affordable alternative to car use. As such, it offers better mobility for adults, children, young people, the aged, persons with disabilities and the poor, who have less access to private vehicles, thereby enhancing social equity.

1.3.5 Staff and Student Attraction

Ease of access has a significant impact on choices of work and study. Negative experiences and costs associated with travel can reduce the competitiveness of a school. High quality and efficient transport systems are key to attracting and retaining staff and students. Support for active transport modes is also highly desired by employers and employees, because it improves health and productivity.

1.3.6 Education and Leadership

Educational facilities would have a high number of new people coming through the organisation each year and as such, the organisation would have a unique opportunity to educate students into sustainable travel behaviours. These travel behaviours can help shape long-term travel behaviours that extend long after their completion at the school. Successful travel planning and education can reduce traffic impacts on the road network while potentially supporting a positive influence on local areas by raising public transport service demand and improving amenity.

1.4 Transport Objectives

The following objectives have been identified in order to facilitate a modal shift towards more sustainable transport modes to achieve the vision of the GTP:

Objectives:

1. Improve access, safety, amenity and convenience of sustainable transport modes for travel to/from the campus

2. Establish a culture of active and public transport use by incentivising sustainable transport modes

3. Achieve modal shift away from car usage by limiting convenience of car access and parking within the campus

4. Maximise use of proposed bus infrastructure (e.g. bus bays) to support modal shift away from car usage.

2 Existing Transport Context

2.1 Existing Transport Services

2.1.1 Bus

The school is currently serviced by one public bus route, namely bus route 407 which provides connectivity between Strathfield Station and Burwood Station. Bus services arrive/depart along the Merley Road and Francis Street site frontages with services running every 30 minutes during the AM and PM school peak periods and every hour during non-peak periods. The public bus network surrounding the school is shown in Figure 2.1.

**Figure 2.1: Local Bus Network Map**

2.1.2 School Bus

School bus services are provided by Transit System for St Patrick's College during school peak periods. Suburbs serviced by morning and afternoon school buses are illustrated in Figure 2.2 and Figure 2.3, respectively.

Morning school bus routes generally provide one or two services per day with the exception of bus route 579 which provides eight services between 7:52am – 8:37am.
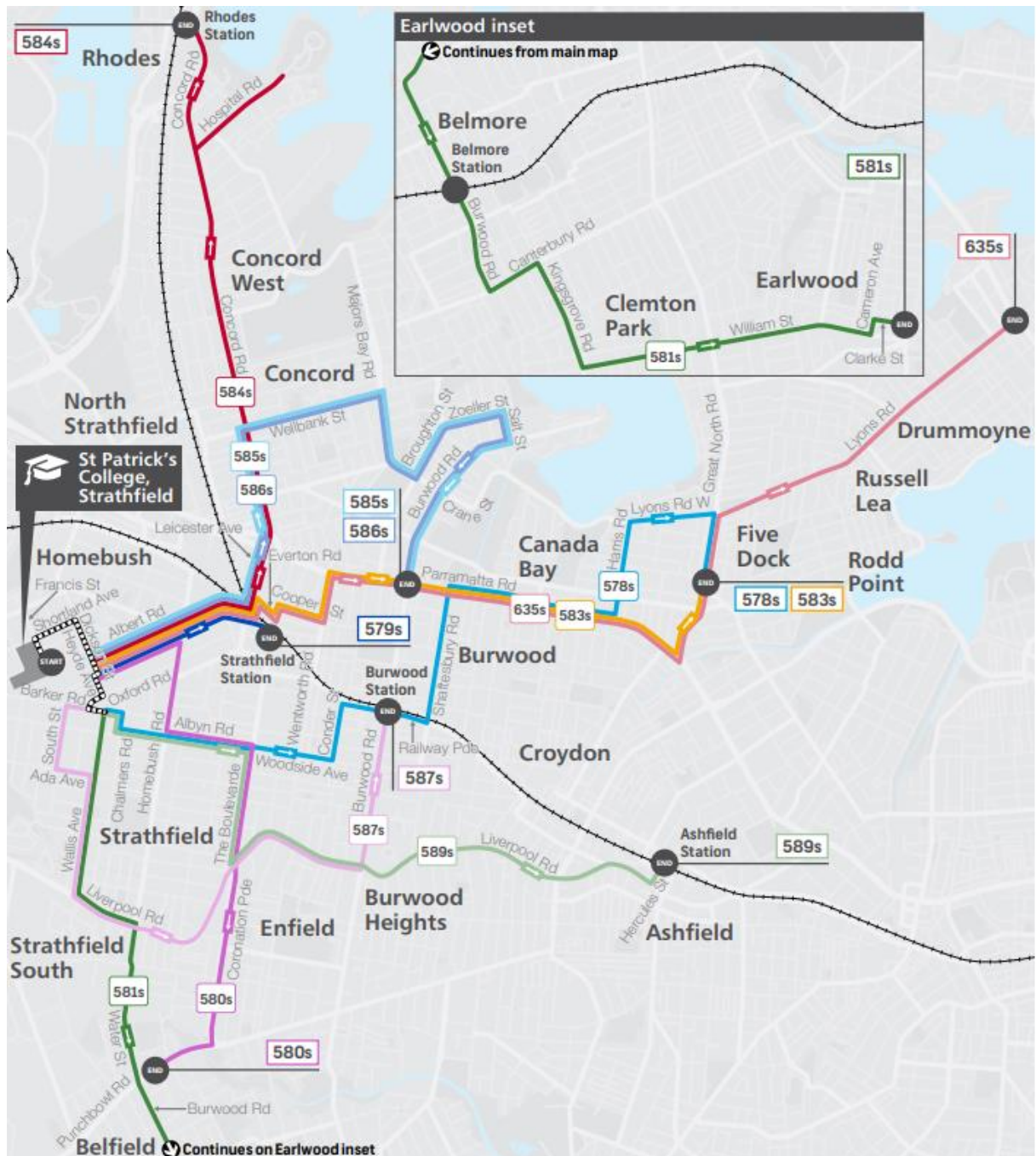
Afternoon bus routes are serviced by one bus with the exception of bus route 579 which provides a direct bus services to Strathfield Station every 5 minutes from 3:20pm to 3:35pm.

Figure 2.2: AM Bus Routes
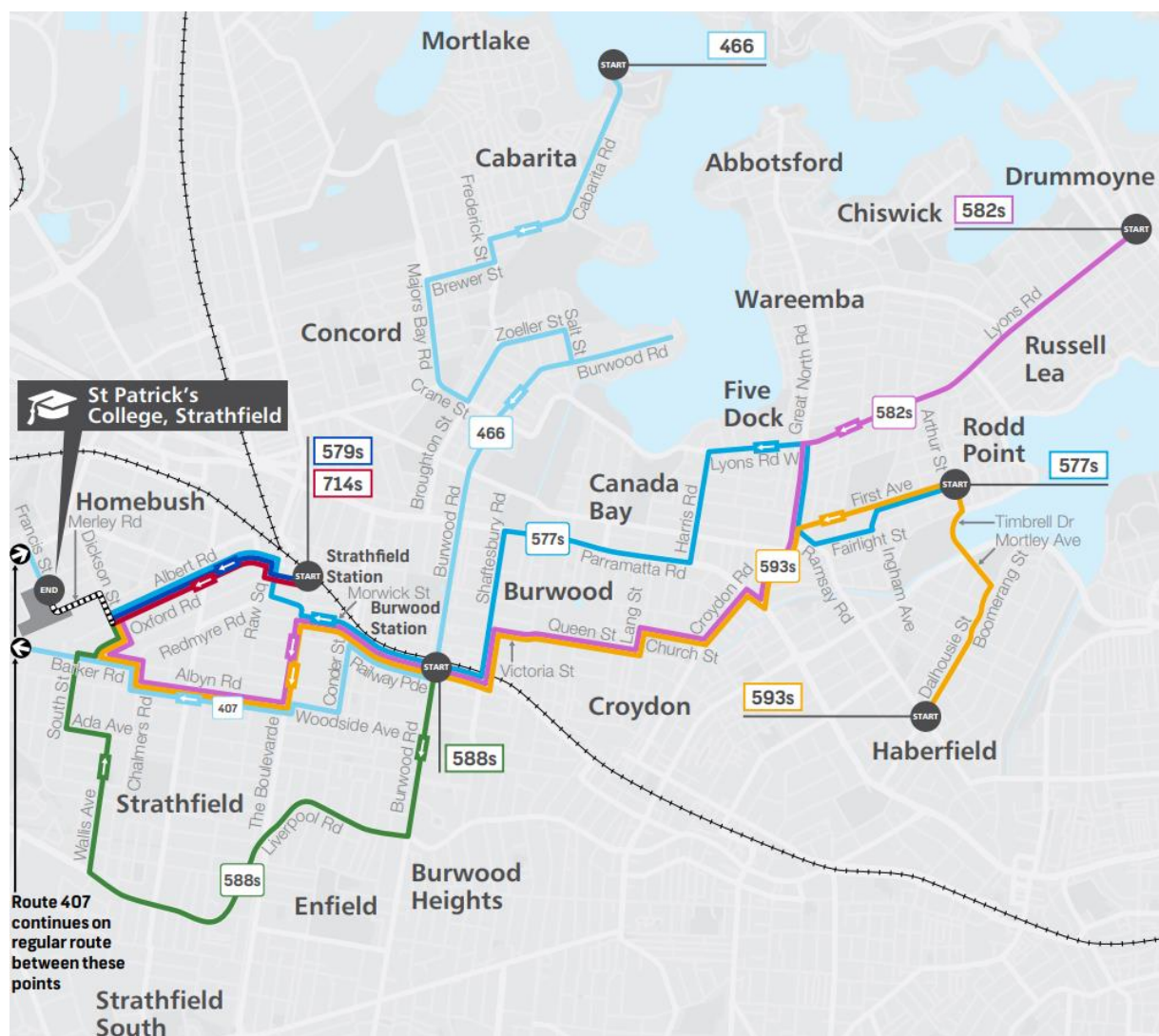
Basemap Source: Transit System St Patrick's College, Strathfield Morning Timetable

Figure 2.3: PM Bus Routes

Basemap Source: Transit System St Patrick's College, Strathfield Afternoon Timetable

2.1.2.1   Existing School Bus Occupancy

A school bus occupancy survey was undertaken by the school on 6 November 2019 during the morning drop-off and afternoon pick-up periods. The results of the survey reveal that the average capacity of buses arriving before school is 65% and departing after school is 50%. This indicates that there is additional capacity on the existing school bus network for additional students in the future scenario.

2.1.3 Strathfield Connector Bus

As part of a new community initiative, Strathfield Council launched a free commuter bus called 'Strathfield Connector' in March 2019. The free commuter bus services residents of Strathfield LGA connecting them with local shops, restaurants and businesses. The free bus service operates seven days a week providing two bus routes (blue route and red route) every 30 minutes between 7am – 7pm.

The location of the bus services can be tracked via the Council's website with live updates on bus whereabouts. The red and blue Strathfield Connector Bus Routes are shown in Figure 2.4

Figure 2.4: Strathfield Connector Bus Routes

Source: Strathfield Municipal Council

2.1.4 Train

The nearest train stations are Flemington Station, Homebush Station and Strathfield Station. These trains stations are located between 1.5km and 2km walking distance (or 17-24 minutes) from the school site.

2.2 Pedestrian and Cyclist Facilities

Paved pedestrian footpaths are generally provided on all surrounding streets in the immediate vicinity of the school site providing accessibility to the wider walking network. A pedestrian crossing facility is provided on Francis Street adjacent to the school entrance.

There are a number of local bike routes provided along Dickson Street and Newtown Road to provide good connections to the wider cycle network surrounding the school. The existing bicycle network is shown in Figure 2.5.
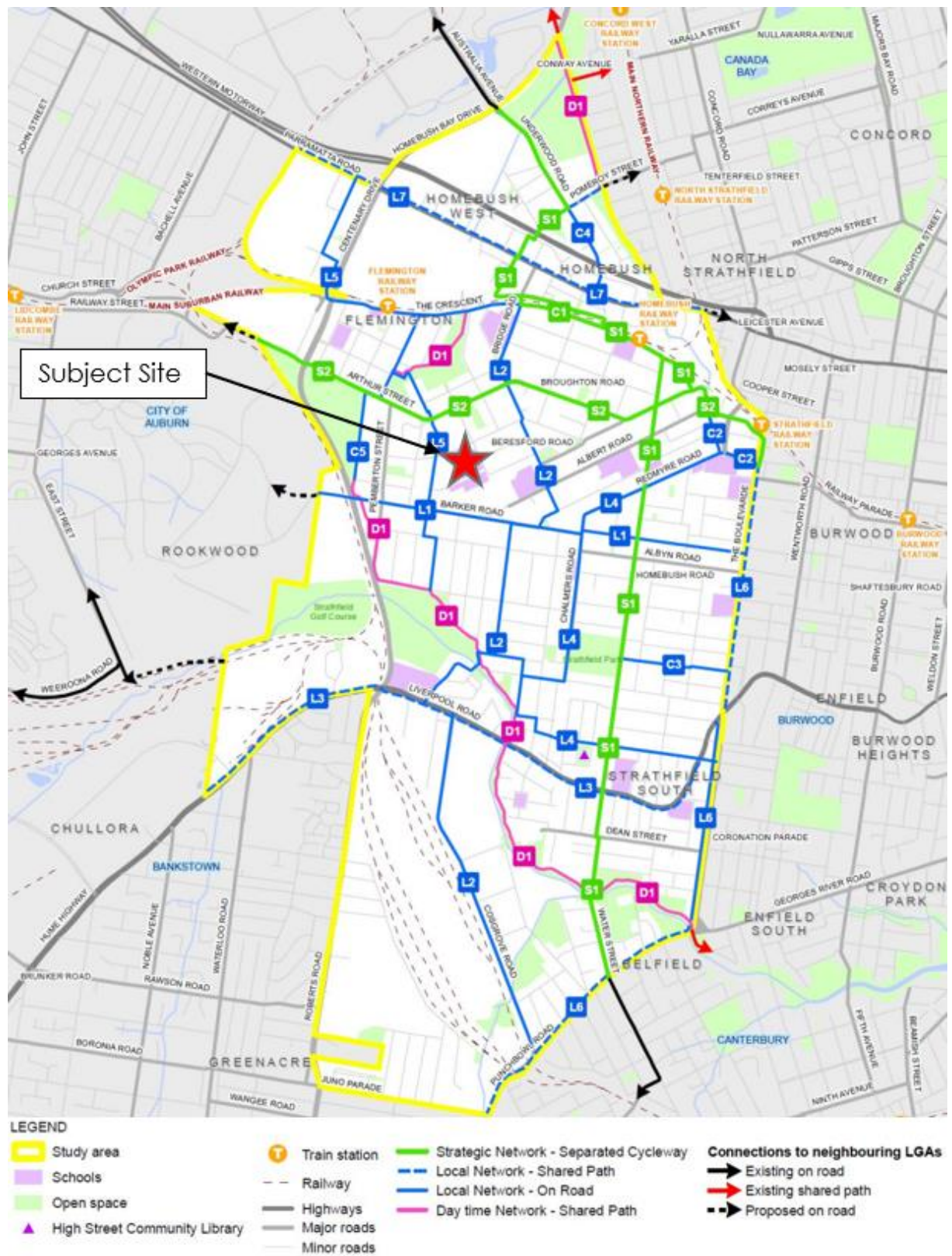
Strathfield Council intends to improve cycling connections in the future as detailed in Council's Active Travel Plan Report and as shown in Figure 2.6.

Figure 2.5: Local Cycleway Map
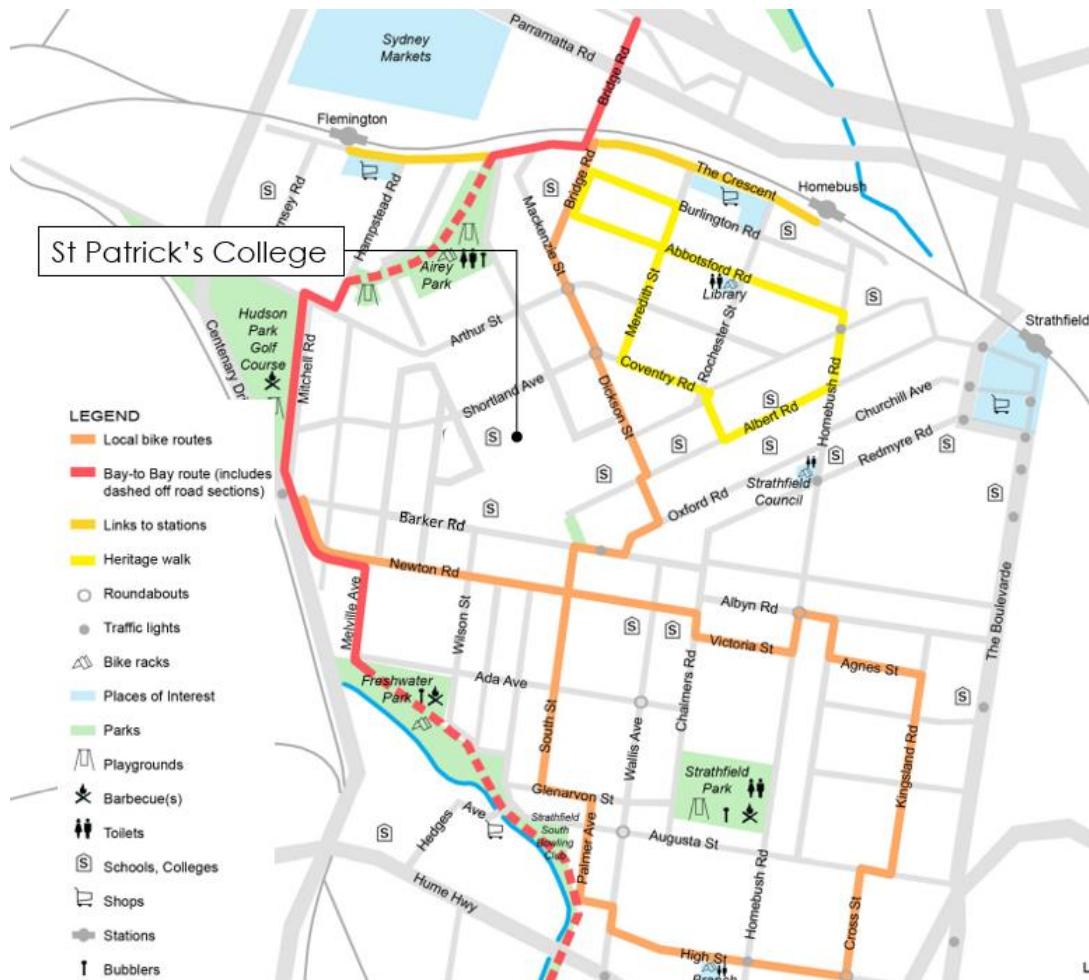
Figure 2.6: Proposed Local Cycleway Map

3 Mode Share

3.1 Existing Travel Patterns

All students (Year 5 to 12) and staff participated in an online questionnaire in August 2019. The key objective of the data collection was to understand travel behaviour of students and staff.

The response rate of the Survey Monkey questionnaire is as follows:

- 1,021 of 1,441 students completed responses (71% response rate), of which:
    - 859 were students in Year 5 to 10, and
    - 162 were students in Year 11 & 12.
- 101 of 140 staff completed responses (72% response rate).

Figure 3.1 provides a summary of the existing modal splits for Year 5-10 students, Year 11 & 12 and staff for travel to school.

Private car travel is the primary mode of travel for staff (92.1%). A small proportion travel by public transport or walk (4% and 3% respectively).

The primary mode share for Year 5-10 students is to be driven by a parent (48.3%) which is almost equal to the population who travel by public transport (46.3%).

Year 11 & 12 students almost evenly travel by private car travel (i.e. as the driver or as the passenger) and public transport (45.7% and 45.1% respectively). Of the senior students who travel by car, those who drive and park at the school make up 14.2%.

Figure 3.1: Existing Modal Split – Staff and Students
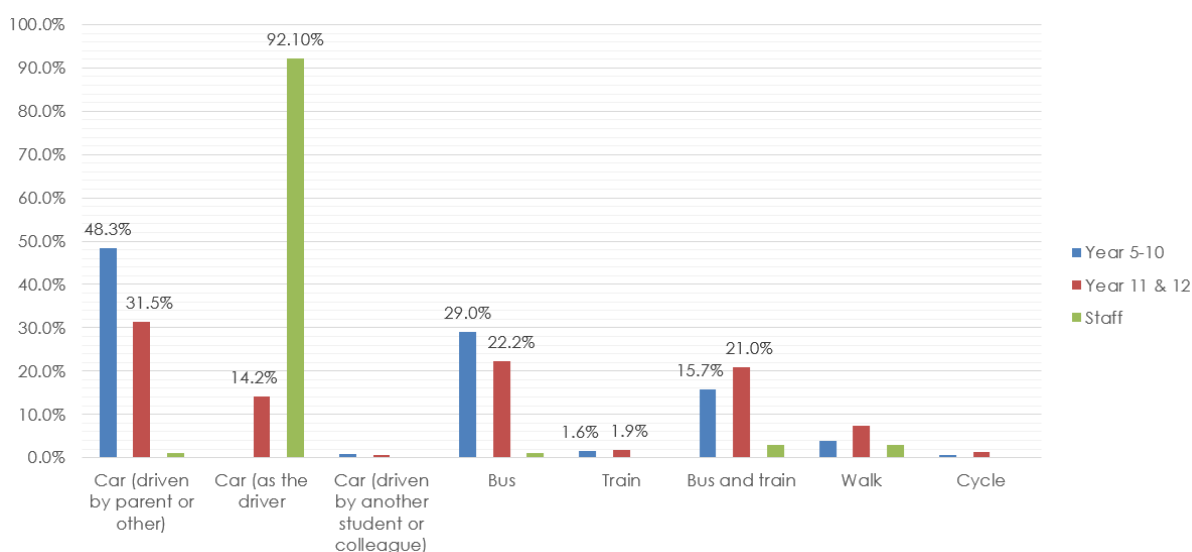
The results indicate a high dependency on car usage for staff while students are travel fairly evenly between private car and by public transport.

3.2   Mode Share Targets

The aim of the GTP is to encourage modal shift away from private vehicles by implementing measures that influence the travel patterns of staff and students. To ensure that the GTP is having the desired effect, the implementation of the GTP would be regularly monitored. The success of the GTP is measured by setting mode share targets and identifying the measures and actions that have the greatest impact.

In order to simplify mode share shift allocation, the modes shown in Figure 3.1 have been collated into three general categories as given in Table 3.1.

Table 3.1: Mode Share General Categories

Mode Share	Staff*	Students*
Private Car [a]	93%	49%
Public Transport [b]	4%	46%
Active Travel [c]	3%	5%
Total	**100%**	**100%**

Notes:
*Percentages rounded to the nearest whole number.
(a) 'Private car' comprises car drop-offs/ pick-ups, car as driver, and car-pooling.
(b) 'Public transport' comprises bus, train, and bus + train combination.
(c) 'Active travel' comprises walking and cycling.

The results of the staff and student modal split survey indicate that car driver mode share is:

- 93% for staff, and

- 49% for students.

A modal shift between 3-5% is typically considered to be a significant achievement (based on knowledge of local and international GTPs, and as stated by experts in Land Environment Court proceedings).

On this basis, the mode share target for private car use by staff and students should be reduced as follows:

- To 88% by staff, and

- To 44% by students.

4   Methods of Encouraging Modal Shift

To achieve the objectives and targets of the GTP measures would be implemented to influence travel patterns to/from school with a view to encourage mode shift away from cars.

4.1   Site Specific Measures

It is recommended that St Patrick's College considers implementation of the following measures to encourage more sustainable travel use as outlined in Table 4.1.

Table 4.1: Site Specific Measures

Item	Description of Measure
1. Reduction of on-site car parking provision	As part of the SSDA, it is proposed to supply a total of 155 car parking spaces based on the existing parking demand by staff and visitors. Off-street parking for staff who live within 5 km of the school may be prohibited from having a parking space in order to increase active travel and reduce short-distance car trips. Driving to school by senior students should be discouraged, and students should be encouraged by the school (as well as parents) to travel by public transport or active travel. For students living within a 2-5km distance of the school walking and cycling should be encouraged.
2. Car-share vehicle	The school currently provides a car-share vehicle which is well-utilised by staff members. On average, the car-share vehicle is utilised once every two days. In light of this, there is capacity to increase its usage amongst staff. It is recommended that the school promotes the availability of a car-share vehicle amongst staff by advertising the car-share via emails, staff newsletters and on noticeboards in common/ staff rooms. The initiative is predominately aimed at staff members who drive to school so that they are able to run errands during the day using their car. Freely accessible car share vehicles would allow staff to run errands during the day as required while using sustainable modes of transport to travel to/from school. Therefore, an easy-to-use online booking system may assist staff make better decisions about travel to/from work if information on vehicle availability was readily accessible. As the use of the car-share vehicle becomes more popular, it is recommended that an additional car-share vehicle/s be provided within the school car park.
3. End-of-trip facilities	<u>Bicycle parking</u> It is recommended that sufficient and secure bicycle parking facilities are provided on campus in the short-term (1-2 years) in-line with existing cycling demand, and increased bicycle parking in the medium to long-term (2+ years). On Day 1 of the new school opening, there should be a minimum of 13 bicycle parking spaces (12 student spaces and 1 staff space) which is based on current cycling trends (as assessed in the Transport Impact Assessment report). The number of bicycle parking spaces could be increased in-line with the number of new staff and students who reside within a 5 km radius of the School. Car parking spaces for these staff members may be swapped for a bicycle parking space. Through the GTP a mode share target for greater cycling travel would be set for the long-term. Bicycle parking is to be provided in areas of passive surveillance by people walking around on campus. Visibility of bicycles would also encourage staff and students to cycle to school. <u>Lockers, change cubicle and showers</u> Shower and change cubicles are to be provided at a rate of 2 showers and change cubicles for 11 to 20 bike parking spaces, and 2 additional showers and cubicles for each additional 20 bike parking spaces. It is noted that there are currently two shower and change cubicles provided at the school; one for each gender.

Item	Description of Measure
	A personal locker is to be provided for each staff member who walks or cycles to school. It is noted that each student is currently provided with his own personal locker
	To encourage cycling, students (and staff) should be educated about the health benefits of riding and how to be a safe rider. Information could be made available through incursions or excursions for students and advertisements (posters and pamphlets) in classrooms and staff rooms.
	Students and staff who live within a 2-5 km radius of the School would be strongly encouraged to cycle, while those living closer than 2 km would be strongly encouraged to walk to school (or cycle, if they choose).
	New staff who live within 5 km of the School may be prohibited from having a parking space in order to increase active travel and reduce short-distance car trips.
	It is noted that e-bikes and e-scooters are becoming more prevalent as a mode choice. Therefore, such mode options could be encouraged as well to reduce car trips. Promotion of the health benefits of alternate modes (biking / walking) would be advertised at the commencement of each term.
4. Walking Groups	Staff employed at the school would be encouraged to walk by implementing a '10,000 steps per day initiative'. This involves encouraging staff to use their existing smart devices (mobile phones, watches, activity trackers etc.) that measure the number of steps they have walked. Staff members who have achieved the 10,000-step goal over the school term could be rewarded.
5. Bicycle User Groups	A cycling group could be established to promote the use of bicycle route/ shared path and allow people to enjoy cycling with the company of others. This would also teach beginner cyclists the necessary skills required whilst cycling on-road. It would be necessary that staff member/ teacher who cycles be appointed to oversee and organise bicycle events and communication regularly to promote cycling.
	Student and staff participation in cycling events, such as the annual National Ride 2 School Day, could be encouraged and incentivised with a mufti-day or barbeque breakfast hosted by the School. More frequent events could be organised to increase opportunities for cycling, for example, the first Friday of the month.
	It is noted that an on-road cycling route is proposed along Marion Street which will provide improved cycling connectivity with the surrounding bicycle network.
6. Public Transport	It is recommended that the school encourages students travel to/from school by school buses, the free Strathfield Connector bus, and public buses. These services provide frequent connections from the school to Burwood Station and Strathfield Station.
	Depending on the effectiveness of the other "soft-measures", it may be necessary that staff be provided with subsidised Opal cards when travelling to/from school. It is recommended that free Opal cards be provided to staff before the start of the school term/ year so that travel patterns can be influenced from Day 1.
7. School Noticeboards	Noticeboards should be provided at key locations and on the School's website to make staff, students and parents more aware of the alternative transport options available.
8. Public Transport Incentives/ Discounts	Posters detailing eligibility for Opal Card concessions, bus services and other public transport information should be placed on noticeboards within the school and emailed to parents and students.
	It is recommended that the school provides public transport fare subsidy to staff to encourage staff to use public transport more. Alternatively, this could be provided as a fringe tax benefit.
9. Online car sharing forum/ Mobile app	A carpooling forum could be developed on the school staff and student/ parent portal to encourage students and staff to travel in groups. The forum will provide a platform for people travelling on the same route to site to find each other and form groups. Existence of the forum will be advertised at information points/ noticeboards within the School, social media and/or on the School's Transport Access Guide (TAG).
	The 'Skoolbag' mobile app could be adopted which will provide more easily accessible information to students and parents. An extension to the mobile app could include an instant messaging service for parents of students using the mobile app to facilitate quick trip-planning and real-time communication.
10. A targeted approach to stimulate	It will be necessary to develop a targeted approach to stimulate carpooling amongst staff. Promotion of the carpooling forums would need to be carried out as part of any staff induction and regular reports distributed to all staff members. In addition to this, social

Item	Description of Measure
carpooling amongst staff	events will go hand in hand with this approach to promote social interaction between staff to reduce social barriers which may deter staff from carpooling with their colleagues.
11. Road Safety Awareness presentations	It is recommended that regular presentations be held during school assemblies to promote active travel and generate interest amongst the staff and students. This presentation should also help students to understand the road rules, as well as teach them how to be safe road users in real-life situations.

4.2   Off-Site Measures

The school shall consult with Strathfield Council with a view to implement off-site measures to improve the transport connections to/from the site including:

- investigations with Council to improve or extend the existing bike routes surrounding the College as shown in Council's Bike Map to better connect the school with the wider cycle network, and

- improved signage and way finding from the surrounding local road network, to improve walking and cycling experience. Signage would include way finding for cyclists on the best and safest route to the school.

4.3   Transport Access Guide

The information provided within the GTP will be provided to students and staff in the form of a package of easy to understand travel information known as a Transport Access Guide (TAG).

TAGs provide customised travel information for people travelling to and from a particular site using sustainable forms of transport – walking, cycling and public transport. It provides a simple quick visual look at a location making it easy to see the relationship of site to train stations, bus stops and walking and cycling routes.

Such TAGs encourage the use of non-vehicle mode of transport and can reduce associated greenhouse gas emissions and traffic congestion while improving health through active transport choices.

They can take many forms from a map printed on the back of business cards or brochures. Best practice suggests that the information should be as concise, simple and site centred as possible and where possible provided on a single side/sheet. If instructions are too complex, people are likely to ignore them.

This TAG is to be available for pick up at various locations within the College such as, at front entrances and noticeboards.

A draft TAG has been prepared for the site and is provided in Appendix A.

5 Management and Monitoring of the Plan

5.1 Management

There is no standard methodology for the implementation and management of a GTP however the GTP would be monitored to ensure that it is achieving the desired benefits. The mode share targets set out in Section 3.2 are used in this regard to ensure there is an overall goal in the management of the GTP.

The monitoring of the GTP would require travel surveys to be undertaken with a focus to establish travel patterns including mode share of trips to and from the site.

The implementation of the GTP would need a formal Travel Plan Co-ordinator (TPC), who would have responsibility for developing, implementing and monitoring the GTP. The TPC would be an appointed staff member at the school.

It would also be necessary to provide feedback to students and staff to ensure that they can see the benefits of sustainable transport.

Once the plan has been adopted, it is essential to maintain interest in the scheme. New initiatives in the plan would need to be publicised and marketing of the project as a whole would be important.

5.2 Green Travel Plan Working Party

It is recommended that a committee known as the Green Travel Plan working party be set up to implement programs and initiatives within the campus to promote increased use of public transport, active transport and car-pooling opportunities. Such a working party may include staff and student representatives and active community/council representatives who could contribute to the process.

5.3 Consultation

The results of the GTP would be communicated with students, staff and to the wider community via the St Patrick's College website and/or noticeboards and newsletters.

As such, it is recommended that a summary letter is produced presenting the results of the survey every 1, 3 and 5 years. This letter/report can be appended to the GTP.

Communication to staff, students, parents and wider community may be carried out in a similar form by public display of the GTP on the school's website and/or noticeboards. Alternatively, a news article on the matter could be included on the website and/or local news bulletin.

Appendix A

Transport Access Guide
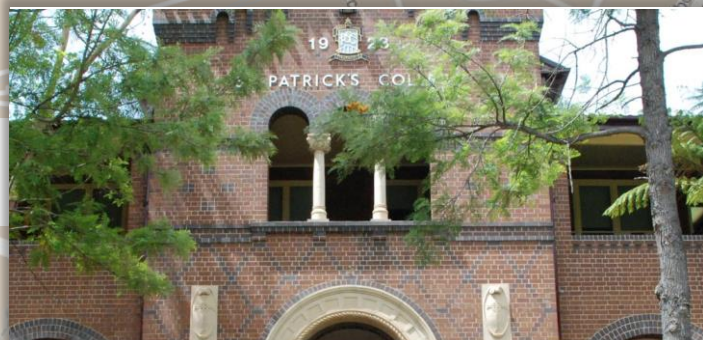
St Patrick's College
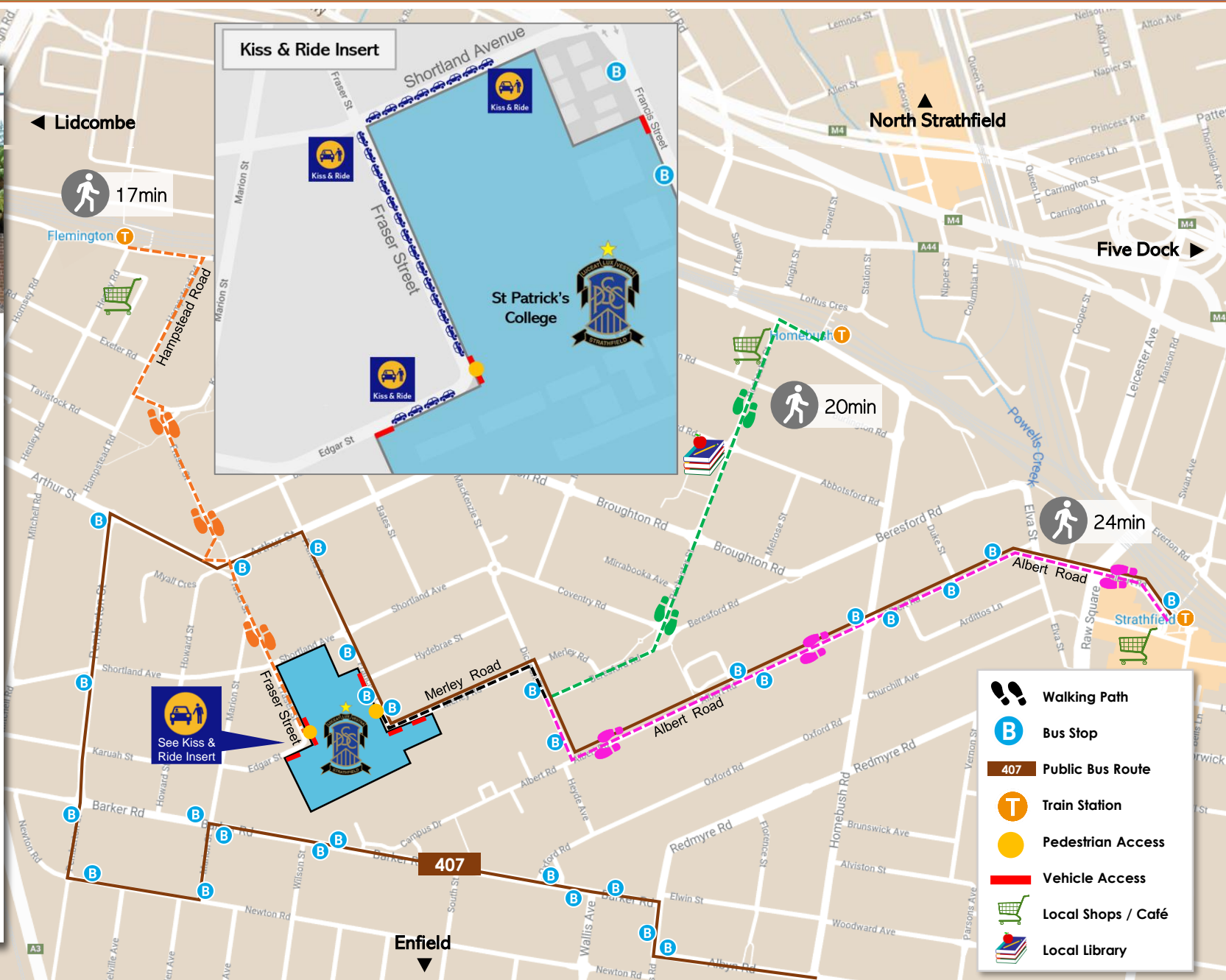### Strathfield

Use active and public transport to get around!

Public Transport Information

Plan your trip using Sydney's Trip Planning Tool:
transportnsw.info/trip

Strathfield Connector Bus:

https://connector.strathfield.nsw.gov.au/

Kiss & Ride Insert

◄ **Lidcombe**

North Strathfield

Five Dock ►

17min

20min

24min

See Kiss & Ride Insert

Enfield ▼

407

Legend

- 👣 **Walking Path**
- Ⓑ **Bus Stop**
- 407 **Public Bus Route**
- Ⓣ **Train Station**
- 🟡 **Pedestrian Access**
- ▬ **Vehicle Access**
- 🛒 **Local Shops / Café**
- 📚 **Local Library**

Flemington Ⓣ

Homebush Ⓣ

Strathfield Ⓣ

Getting Around

Walk

Start walking today to achieve a goal of 10,000 steps per day!

Walk to key locations and attractions within your local area in minutes!

Journey Times 🕐

10 minutes to Airey Park
10 minutes to Hudson Park Oval
12 minutes to Freshwater Park
13 minutes to Strathfield Library
15 minutes to Flemington Local Shops
16 minutes to Homebush Local Shops
22 minutes to Strathfield Park
24 minutes to Strathfield Local Shops

Drop-off/ Pick-up and Staff Parking

• Kiss and Ride zone for parents and students is provided along Edgar Street, Fraser Street and Shortland Avenue (see Kiss & Ride insert overleaf).

• St Patrick's College Staff parking access via Merley Road, Francis Street, Fraser Street and Edgar Street.

B Bus

Bus services are available on Francis Street, Dickson Street and Barker Road within 5-minute walk from the School.

Route	Morning Services
466	From Cabarita
577s	From Rodd Point
579s / 714s	From Strathfield Station
582s	From Drummoyne
588s	From Burwood Station
593s	From Haberfield

Route	Afternoon Services
578s / 583s	To Five Dock
579s	To Strathfield Station
580s	To Belfield
581s	To Earlwood Shops
584s	To Rhodes Station
585s / 586s	To Concord
587s	To Burwood Station
589s	To Ashfield Station
635s	To Drummoyne

For detailed school bus routes and times please check:

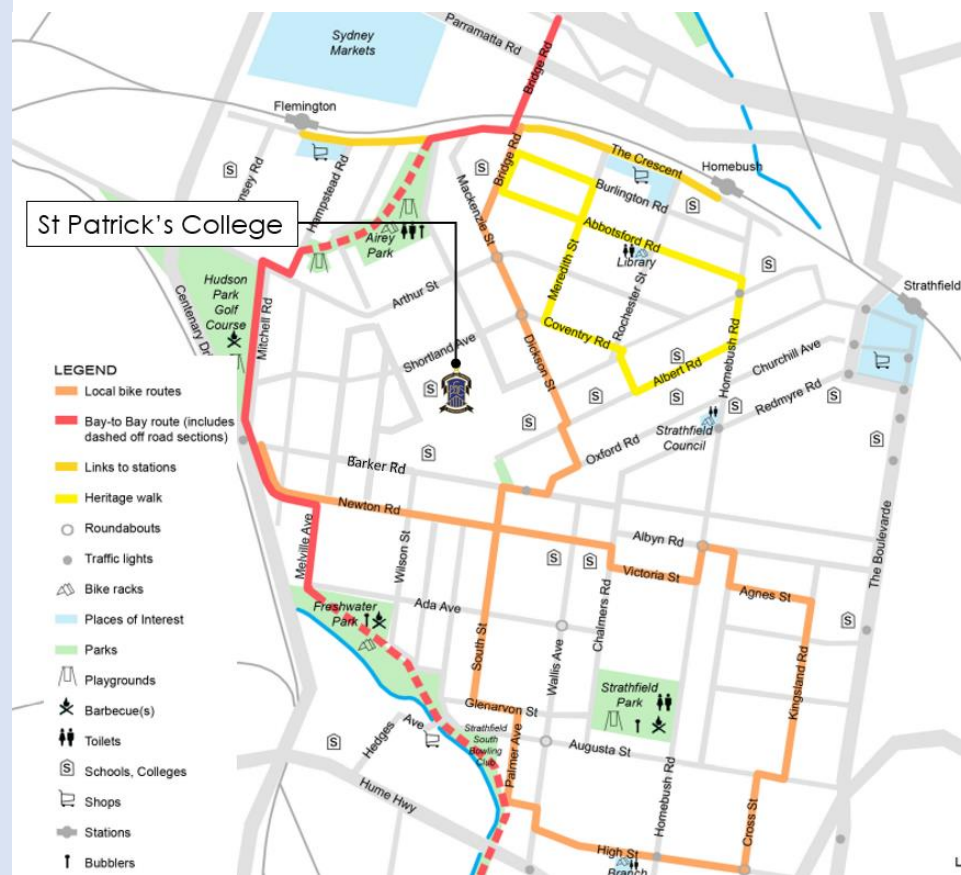*https://www.transitsystems.com.au/s/st-patricks-college-strathfield-9xws.pdf*

Cycle

There are many cycleways in the proximity of the sites, providing connectivity to North Strathfield, Concord West, Strathfield South.

Majority of cycleways surrounding the schools are primarily provided as off-road shared paths which share the footpaths with pedestrians.