

Department of Education
**Alexandria Park Community
School**
Green Travel Plan

Issue | 5 September 2017

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Job number 256193

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Document Verification

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Job title		Alexandria Park Community School		Job number		256193	
Document title		Green Travel Plan		File reference			
Document ref							
Revision	Date	Filename	Draft Green Travel Plan_20170811.docx				
Draft 1	11 Aug 2017	Description	First draft				
			Prepared by	Checked by	Approved by		
		Name	John Fahey				
		Signature					
Issue	5 Sep 2017	Filename	APCS Green Travel Plan Issue.docx				
		Description					
			Prepared by	Checked by	Approved by		
		Name	Ryan Wong	Andrew Hulse	Andrew Hulse		
		Signature					
		Filename					
		Description					
			Prepared by	Checked by	Approved by		
		Name					
		Signature					
		Filename					
		Description					
			Prepared by	Checked by	Approved by		
		Name					
		Signature					
<div>Issue Document Verification with Document</div> <div> <input checked="" type="checkbox"/> </div>							

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1 Introduction

Arup has been engaged by TKD Architects on behalf of the Department of Education to prepare a Green Travel Plan as supporting documentation to accompany a development application for the site with regards to the State Significant Development (SSD) assessment criteria (Application Number - SSD 17_8373). This Green Travel Plan has been prepared in consultation with the school and will form the basis of a combined Green Travel Plan.

1.1 Site Description

The proposed redevelopment consists of the demolition of existing and construction of new buildings at the Alexandria Park Community School Park Road Campus. The school is bounded by Buckland Street in the north, Park Road in the east and a shared pedestrian path connecting Belmont Street and Buckland Street in the west. Alexandria Park is located just east of the school which is segregated by Park Road.

1.2 Project Application Description

It is proposed that the existing primary school be substantially demolished and replaced with two multi-story buildings, a primary school and a secondary school. The buildings will be connected with by a pedestrian link at level 1.

1.3 School population

The current population of the school is approximately 600 students and 54 staff. This is proposed to increase to 2,200 students and 200 staff. The primary school will have a population of 1,000 and the secondary school a population of 1,200.

1.4 What is a Green Travel Plan?

A Green Travel Plan is a package of measures put in place to try and encourage more sustainable travel whilst commuting and also during the course of activities, including business and delivery travel or other visitors to the site. It is a means for an organisation to demonstrate a commitment and take a pro-active step towards improving the environmental sustainability of its activities.

More generally, the principles of a Green Travel Plan are applied to all people travelling to and from a site. Government authorities are placing increasing emphasis on the need to reduce the number and lengths of motorised journeys and in doing so encourage greater use of alternative means of travel which have less environmental impact than the car.

1.5 Objectives

The objectives of a Green Travel Plan are:

1. **Travel Demand Management** which reduces the need for energy intensive car, taxi or air travel by combining journeys for different purposes, travelling to alternative closer locations, or using other means of communications e.g. audio conferencing, video conferencing and working at home or other off-site locations using email or wireless telecommunications.
2. The use of **more sustainable transport modes** i.e. walk, cycle, bus, motorcycle, car sharing, tram, bus and rail in place of the higher energy consumption travel modes such as single occupant car travel, taxi and air travel. This generally requires improving people's travel choices by making more travel modes available (i.e. to improve mobility for non-car-drivers). The alternative measures of reducing mobility for car drivers by increased road usage and parking charges or restricting road and parking capacity are also an option, particularly in congested locations.

2 Transport and Access Service Strategy

2.1 Mode split

The travel characteristics of the workers in local employment area are provided by the Bureau of Transport Statistics 2011 Journey to Work data. The data identified 1,467 people as working in the local travel zones that cover the Alexandria Park Community School campuses. The mode split of those commuting to the area is presented in Figure 1.

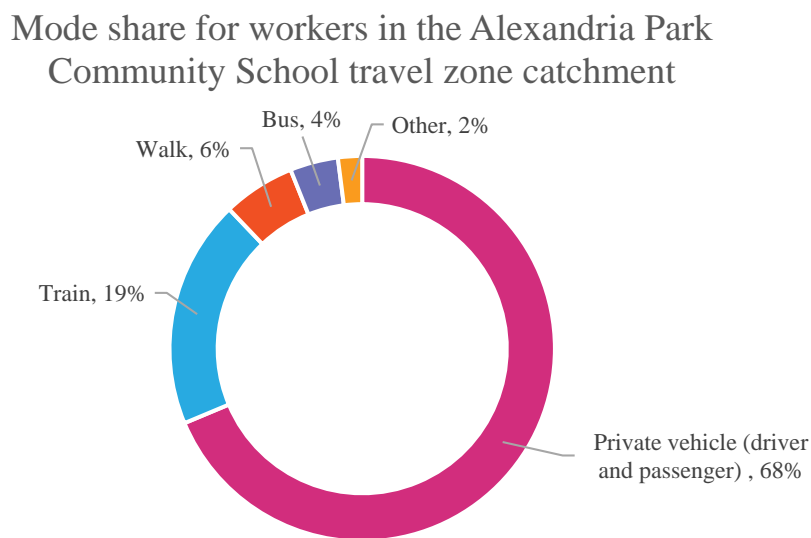


Figure 1: Journey to work mode share data for the local travel zones around Alexandria Park Community School (BTS 2011 Journey to Work¹)

Public transport accounts for almost a quarter of all commuting trips to the area, with train use relatively high due to the close proximity to Erskineville, Green Square and Redfern train stations (see Section 3 of the Transport Assessment Report for additional detail). The levels of active transport (i.e. walking and cycling) are relatively low, however, given the anticipated future increase in residential population in the Erskineville and Alexandria area, this would be expected to improve.

Travel by private car is high, however, given the limited amount of parking available in the area, this would be expected to reduce.

Given the nature of the development and its location close to Green Square (where a significant increase in population is expected) and Waterloo Metro Station, a significant model shift away from private vehicle use (compared to current travel patterns for the area) is appropriate and could be expected following the implementation of travel demand measures outlined in this strategy.

¹ <http://visual.bts.nsw.gov.au/jtwbasic/#258,257>

2.2 Cycling Access



Figure 2 Strategic Cycleway Network Map

The overall cycling infrastructure surrounding the school is robust with good cycling connections in each direction. The residential streets around the school are bicycle friendly with low traffic volumes observed. Staff and high school students should be encouraged to cycle to school, as such, the following cycle parking provisions are proposed:

Table 1: Proposed bike parking provision

	Number of people	Rate	Bike spaces
School Staff	200	1 per 10 staff	20
High school students	1,000	1 per 10 students	100
Primary school students	1,200	1 per 50 students	24
Total proposed provision			144

A total of 144 bike parking spaces are proposed. To complement the parking facilities, the school should provide two shower facilities for staff as an end of trip provision. The proposed bicycle parking facilities will be located within the school, near the school entry. Bike parking facilities should be designed in accordance to Standards Australia AS2890.3 (Bicycle Parking Facilities), and should be provided in a sheltered and secure location.

2.3 Walking network

The site is in an established urban area with a good network of footpaths on either side of the road. The site is within 12 minutes' walk to Green Square and key transport nodes while the future Metro station at Waterloo will be 8 minutes' walk. Crossing facilities are provided at all signalised intersections on approach to the site with zebra crossings also provided on Buckland Street and Power Avenue.

2.4 Car parking

The proposal seeks to maintain a total of 28 formal car parking spaces for the school which is the same as is currently provided. There will be no provision made elsewhere on site for any car parking, including informal parking. This will encourage staff to use public transport and active transport modes for site access. Some on-street parking is also available along Park Road and surrounding streets.

2.5 Public Transport Accessibility

Alexandria Park Community School is easily accessible to multiple train stations. The campus is within a 10-15 minute walk to Redfern, Erskineville and Green Square Railway Stations.

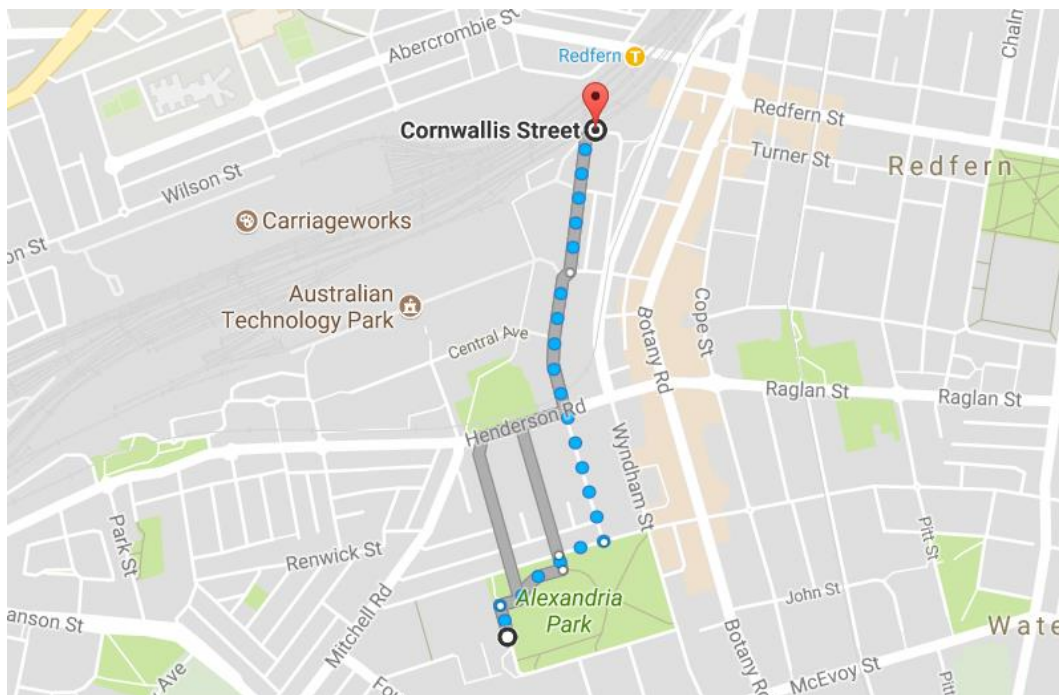


Figure 3 Pedestrian Route to Redfern Station from Alexandria Park School

Bus services are available Wyndham Street, Botany Road, McEvoy Street and Mitchell Road, will within a short walking distance of the school.

- From the city, the 309 and 310 both stop on Botany Road while the 308 stops on Mitchell Road.
- From the south, the 309 and 310 both stop on Botany Road
- From the east, the 355 stops outside the school on Park Road while the 370 stops on McEvoy Street.
- From the west, the 308 stops on Mitchell Road, the 355 stops outside the school and the 370 stops on McEvoy Street.

2.5.1 Sydney Metro

The Chatswood to Sydenham section of the Sydney Metro has been approved and includes a new station at Waterloo. This station will be accessed via the corner of Raglan and Cope Streets, about an 8 minute walk from the Park Road school entrance. Indicative travel times from Waterloo are two minutes to Central Station and six minutes to Martin Place Station.

2.5.2 Sydney's Walking Future

Sydney's Walking Future, released by Transport for NSW in December 2013, sets out a strategy to encourage people in Sydney to walk more through actions that make it a more convenient, better connected and safer mode of transport.

Key points to emerge from the strategy with relevance to the schools include:

- Commitment to invest in new walking links that connect people to public transport.
- Investment in walking infrastructure to be prioritised within 2km of centres and public transport interchanges. Green Square is identified as one such centre (see Figure 4).
- Commitment to update guidelines to improve walking design across and next to roads, and around local centres, including driveways and footpaths on side streets



Figure 4 Proposed improvement to access Green Square Station

2.5.3 Sydney's Cycling Future

Sydney's Cycling Future (released December 2013) provides a framework for the way cycling is planned and prioritised in Sydney. Key points to emerge from the strategy with relevance to this study include:

- A safe and connected bicycle network benefits the wider transport network by improving access to towns and centres, reducing congestion and increasing capacity on the public transport system.
- Bicycle treatments should provide safe separation from motor vehicles and pedestrians where possible (see Figure 5).
- Investment in bicycle infrastructure should be prioritised within 5km of public transport interchanges.

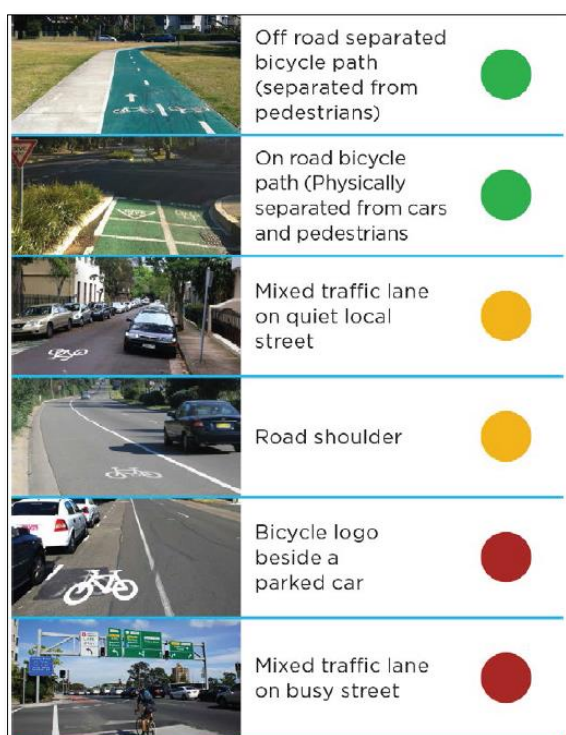


Figure 5: Preferred cycling infrastructure

Source: Sydney's cycling future

In close proximity of the school to the south is Bourke Street where a new and existing shared path will be upgraded to connect the Bourke Street and Bourke Road cycleways, and provide a 7 kilometre north–south corridor from Mascot to Woolloomooloo.

The 1.5 kilometre upgrade between Phillip Street, Redfern and Botany Road, Green Square will include wider footpaths, improved street lighting, new garden beds and bus shelters, extra seating and bike parking, and signage to remind bike riders to ride slowly.²

² Source: <http://www.sydneycycleways.net/projects/bourke-connector/>

2.5.4 Sydney Bus Futures

Sydney's Bus Future is the Government's long term plan to reconfigure Sydney's bus network to be consistent with the *Long Term Transport Master Plan*. The document was released in December 2013 and is a key reference for the planning of bus infrastructure in Sydney, highlighting measures for the short, medium and long term for both the wider network and specific corridors. *Sydney's Bus Future* proposes a tiered bus network comprised of rapid, suburban and local routes as shown in Figure 6.

Rapid	Suburban	Local
<ul style="list-style-type: none"> Frequent 'turn up and go' services without the need for consulting a timetable 13 routes (2 Growth Centre routes, 5 new end-to-end services and 6 established routes) Stops every 800 metres to 1 km Investment in bus priority infrastructure for fast and reliable journeys. 	<ul style="list-style-type: none"> A mix of frequent 'turn up and go' and timetabled services 20 cross-metropolitan routes initially, including 8 new end-to-end services Additional Suburban routes to be identified and introduced Stops every 400 metres Bus priority targeted at key pinch points to speed up services. 	<ul style="list-style-type: none"> Timetabled services Completes the network, providing services such as local shopping services, CBD shuttles, peak expresses Stops every 400 metres Peak express services with variable stop spacing Services use local streets and roads, and bus priority for peak express connections.

Figure 6 Tiers for Sydney metropolitan bus network
(Source: *Sydney's Bus Future*, 2013)

2.6 Summary

Public transport accessibility to Alexandria will be enhanced considerably through the delivery by NSW Government of the planned public transport upgrades across the Sydney network.

3 Green Travel Plan Framework

This Green Travel Plan specific for the schools need to address the following issues:

- What are the **objectives** for the schools in terms of travel journeys to and from the school, during school hours and other travel to and from the school?
- How are the set objectives going to be met? What **measures** are going to be implemented and encouraged?
- Who is going to be responsible for the management, implementation and administration of the measures?
- How will students and staff be encouraged to reduce car dependent travel?

These matters are addressed in the following sections.

3.1 Green Travel Plan Objectives

The main objectives of the Green Travel Plan are to reduce the need to travel and promotion of sustainable means of transport.

The more specific objectives include:

- High modal share for public transport, cycling and walking to school journeys;
- To ensure adequate facilities are provided at the site to enable staff, visitors and students to commute by sustainable transport modes;
- To reduce the number of car journeys associated with business travel by staff and visitors;
- To facilitate the sustainable and safe travel of new staff;
- To reduce the need to travel for work-related activities; and
- To raise awareness of sustainable transport amongst staff, students and visitors.

3.2 Green Travel Plan Measures

A range of travel method alternatives have been recommended as well as incentives to change travel behaviour over the short and longer term period. The purpose is to encourage mode shifts away from private vehicle usage and create a positive outlook for active transport.

These initiatives aim to improve the existing and future conditions of campus population increase by:

- Reducing private vehicle usage from staff and therefore parking demand
- Reducing private vehicle usage (pick-ups and drop-offs) from students
- Reducing traffic congestion and improving intersection performance

The modal shift associated with these travel methods aim to reduce car trips to the development so there is no net impact from School population and proposed development increases on existing traffic conditions.

3.2.1 Existing School Measures

Currently students have to pay for public transport if they live within a certain distance of the School. This varies between the year groups and costs up to \$52 per term if they live within the distances as follows:

- a primary student (Years 3-6) who lives more than 1.6km (radial distance) from school, or 2.3km or more by the most direct practical walking route
- a secondary student (Year 7-12) who lives more than 2km (radial distance) from school, or 2.9km or more by the most direct practical walking route

It should be noted that an infant student (K, Year 1 and Year 2) older than 4 years and 6 months who lives any distance between home and school does not need to pay for public transport passes.

The School currently coordinates the process of having bus passes arranged for students. The School will continue to do this and raise awareness of this as an offering, to encourage greater use of public transport.

3.2.2 General Marketing and Promotion

The objectives of the Green Travel Plan will only be achieved with the support of staff and student's parents. Marketing the benefits and promoting the sustainable alternatives available are therefore crucial in encouraging staff and students to adopt the Green Travel Plan measures. It is important that at an early stage, everyone is made aware of the need for the Green Travel Plan, and that it is emphasised that the measures are being introduced to support and encourage people to use cars more wisely.

In addition to raising general awareness, any successes achieved will be fully publicised to staff and students in order to motivate them to use sustainable modes of transport.

- A dedicated webpage for employees could be created to include travel information section containing information on cycle parking and useful links to public transport websites specific to the school location; and
- Support and promote events such as National Bike Week, Bike2Work Days, walk to work day to staff through lunch time presentations or students during assembly, notice board posters, newsletters intranet and email.

3.2.3 Cycling

As described in Section 2.2, the schools have good access to the cycling network and will provide onsite facilities for cyclists (i.e. easily accessible bike room/shelter, changing rooms and showers, lockers etc.). In order to activate and promote cycling the following measures should be considered:

- Supply a Green toolkit-this can consist of puncture repair equipment, a bike pump, a spare lock and lights;
- Come to an arrangement with a local cycle retailer for cheap servicing of student and staff bikes. If people buy enough bikes from the retailer, they may agree to service them for free;
- Consider providing interest-free loans for staff to buy a bicycle and accessories, which they then pay back from their wages;
- Provide cycle maps to staff and students;
- Participate in annual events such as 'Ride to Work Day';
- Notice boards should have news of events / generic posters promoting cycling;
- The schools should have a 'Cycling to school' webpage specific for their school containing details of storage areas, shower facilities and links on the intranet containing useful links to journey planning websites in Sydney;
- Make staff and students aware of public transport cycling carriage policies and cycle storage facilities at rail stations;
- Staff and students who cycle should be encouraged to form a Bicycle User Group in order to provide a body of regular cyclists who can discuss on issues relating to the provision of on-site cycling facilities and the maintenance of off-site cycle routes; and
- Set up 'Bike Buddies' scheme for less confident people interested in cycling.

3.2.4 Public Transport

To promote the use of public transport for travel to school and school-related journeys during the day.

- Provide a minimal number of parking spaces for staff within the school sites to encourage the use of public transport travel;
- Manage the student drop-off and pick-up areas surrounding the schools;
- Continue to discourage high school students from being dropped off or picked-up surrounding the schools;
- Provide an intranet public transport page to contain useful links to journey planning websites in Sydney;
- Provide useful public transport maps and promotional items to potential and current public transport users in the existing induction pack for new employees; and
- Provide notice boards that should have news of events / generic posters promoting public transport.

3.2.5 Walking

Specific Travel Plan measures designed to encourage more walking trips to and from the schools by those staff and students living within a reasonable distance.

- Produce a map showing the most direct route connecting the transport interchange and schools, along with the estimated walking time;
- Produce walking related articles for inclusion in the school newsletters focussing on 'walking champions' to highlight best practise in walking;
- Create and maintain an intranet 'useful walking routes' containing useful routes to key areas;
- Make pedometers available to staff and students expressing an interest in walking to school; and
- Participate in Walk to Work day and look into holding a 'healthy breakfast' as a reward to all those who participate.

3.2.6 Pool cars, taxi share and shuttle bus service

In order to reduce the number of car trips and especially trips made to common destinations the following measures should be considered:

- Set up a journey to/from school car share system for all staff who are willing to participate in the scheme and dedicate at least one car space for this use. The system would inform participants of other staff who live in the same area or who pass through the area on their way to the schools. The participants either share the costs or alternate in driving to the schools;
- Utilise a range of free apps are currently available online to assist with the implementation of this initiative. The schools will need to investigate the most appropriate app that aligns with its Child Protection Policies before promoting this initiative; and
- Introduce a taxi or pool car share system for trips during the day for staff.

3.2.7 Staff Induction

To ensure new members of staff are aware of the Green Travel Plan, all new staff members should be made aware of the Plan as part of their induction process. The Green Travel Plan section of the induction should provide new starters with the following:

- A brief introduction to the Green Travel Plan and its purpose;
- Tour of the schools to include visit cycle parking areas and shower and changing facilities; and
- Provision of a Green Travel Plan information package which would include information on incentives to use sustainable means of transport e.g. pool bikes and car/taxi share system.

3.3 Scheme Administration

3.3.1 Administration

An essential part of an effective Green Travel Plan is to nominate a Travel Plan Co-ordinator for both the primary and secondary school. The role should be undertaken by enthusiastic and high quality communicators in order to promote measures that will encourage people to think about travel other than as a single occupancy car user. He/she will need to be an enthusiastic and respected member of staff who is keen to champion the cause of the Travel Plan. Other qualities that may be appropriate include the capability of dealing with all types of people within the schools and external organisations, the ability to lead by example, the ability to approach issues with a practical and balanced perspective and the capability for original and innovative thinking to raise awareness of the Travel Plan at a local level.

Senior management support is critical to ensuring the success of any travel plan for a number of reasons such as to:

- Lead by example;
- Allow budget allocations for the implementation of measures; and
- Give support to changes or development of policy documentation.

Administration of the Travel Plan involves the maintenance of necessary systems, data and paperwork, consultation and promotion.

3.3.2 Consultation

The success of the Green Travel Plan will rely on the support of the employees which will be overseen by the Green Travel Plan co-ordinator.

The Green Travel Plan co-ordinator will be responsible for all liaisons with outside bodies, including local transport operators, planning and highway authorities.

Liaison with officers of the Council (e.g. those responsible for cycling and public transport will be undertaken as required). The co-ordinator will also seek to join and attend meetings with any local travel forums as appropriate in order to exchange ideas with other like-minded organisations.

3.3.3 Promotion

All students and staff will be made aware of the details of the Green Travel Plan, its objectives in enhancing the environment and the role of individuals in achieving its objectives at its launch.

Other promotional material will take a variety of forms and will be issued either to individual staff members and students, displayed in a prominent location in the school or provided in the form of 'one off' marketing initiatives. This would include outlining the benefits for the school in participating in government travel surveys to both improve public transport services and promote the use of public transport.

The promotional material will advise employees wishing to raise specific transport-related matters to discuss them with the appropriate nominated Travel Plan co-ordinator who in turn would liaise with the Green Travel Plan management team, transport operators and the local authority as required.

3.3.4 Updating, reviewing and monitoring

The Green Travel Plan is a strategy that will evolve over time. Although the objectives of the Plan to 'educate' students and staff, and to facilitate travel by sustainable modes will not change, it may be possible over time to define or re-define specific targets. Target setting should reflect an ambition for continued progress year on year and there should be a mechanism to review targets in light of monitoring surveys. The monitoring measures could include collecting data on travel patterns for journeys to school and also during the school hours. The recorded data would inform modes of transport and distance travelled by each mode, from which energy consumption and emissions could be estimated.

Following the implementation to the Green Travel Plan, the Green Travel Plan management team should meet annually to undertake a review of the Travel Plan measures in place. The objective will be to measure their success and to identify the potential for refinements. The plan would be updated to consider firmer details of the initiatives of the NSW Long Term Transport Masterplan, as they are forthcoming. The management team will further engage with Government to assist in designing and operating services which best support the needs to the students and staff, and therefore promote high levels of sustainable transport modes.

The Green Travel Plan management team will then compile a review report outlining the results of the review. The report will also incorporate the results of on-going monitoring processes throughout each of the preceding periods.

4 Conclusion

Implementation of a Green Travel Plan and travel demand measures are essential for providing access to students, staff and visitors of the Alexandria Park Community School in a sustainable way and meeting the low car mode share targets. The Green Travel Plan will contribute to a healthier and better quality of life for students and staff, and a reduction in air and noise pollution. The schools will benefit from more productive staff and students, cost savings and reduced demand for car parking.