55-89 Chandos St & 58-64 Atchison St St Leonards - Planning Proposal

Draft Green Travel Plan

Prepared for:

TWT Property Group Pty Ltd

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The Transport Planning Partnership

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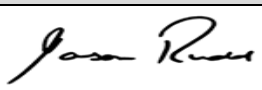
V01	30 August 2018	J. Rudd	J. Rudd	
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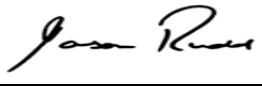
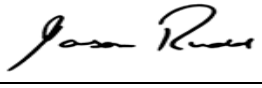
V03	1 September 2018	J. Rudd	J. Rudd	
V04	3 September 2018	J. Rudd	J. Rudd	

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1 Introduction

1.1 Background

This Draft Green Travel Plan (GTP) has been prepared to accompany a planning proposal by TWT Property Group Pty Ltd to North Sydney Council for a proposed mixed use development at 55-89 Chandos Street and 58-64 Atchison Street, St Leonards.

It is understood that the Planning Proposal for the site will include in the order of :

- 438 residential apartments
- 8,908 m2 of non residential floor space including approximately 4,000 m2 of "creative" floor space such as galleries, art studios, museum, dance schools.

1.2 Purpose of this DRAFT Green Travel Plan

The purpose of this Draft GTP is to set out a strategy for managing the proposed development's travel demand in a sustainable manner. In essence, the GTP sets out measures to encourage the use of transport modes that have a low environmental impact, such as active transport modes (walking and cycling), public transport and better managed car use.

The Site is located within the St Leonards Precinct 2 & 3, which has good access to high frequency public transport and community services.

It is noted that the road network through St Leonards experiences peak period congestion associated with the Pacific Highway acting as a major arterial thoroughfare. Additional general development within St Leonards will, if not planned appropriately, increase these pressures.

Hence the implementation of this Draft GTP is considered to be mechanism to encourage the site's population to utilise the site's good access to public transport and active transport links while discouraging use of private motor vehicles during peak traffic periods.

It is also noted that the North Sydney Development Control Plan (2013) has been amended recently to reflect the transport demand management objectives that were identified in the St Leonards / Crows Nest Planning Study (Precincts 2 & 3). For St Leonards Precinct 2 & 3, the North Sydney DCP 2013 has established controls to promote sustainable (green) travel modes for trips to and from St Leonards.

These controls include:

- Maximum on site car parking provisions;
- Generous bicycle parking facilities;
- Motor cycle parking and
- access to car share facilities.

Thus development in line with the DCP controls will have already set in place measures to promote sustainable travel.

It is intended that this Draft GTP establish a framework of measures to address travel demand and achieve a modal shift to non-private vehicle travel. It is intended that this framework will be further refined, and specific measures defined through the development application and subsequent planning stages of the proposal.

Furthermore, as with any effective GTP, it will be a "live" document which would be reviewed and revised as necessary to address changing travel demands of the site and changing surrounding conditions. For example, the construction of a new Metro Station within close proximity to the site.

This Draft GTP addresses travel demand measures for the residential population of the site and for the site's employees and visitors.

Furthermore it is noted that the Planning Proposal seeks to provide some 4,000 m2 of 'creative' floor space which will provide a large and unique offering to the population of St Leonards and beyond. Such a unique offering will provide a public benefit both culturally and also with regard to transport as locally accessible facilities reduce the need for longer distance travel by private or public transport but rather by foot.

The 'creative' space may also act as a destination and the measures to manage such demand will need to evolve over time to reflect the specific requirements of the various potential 'creative' floor space uses. Hence the preparation of this DRAFT plan with the recognition that the plan will change and be updated over time.

1.3 The Role of Green Travel Plans

The purpose of a Green Travel Plan (GTP) is to encapsulate a strategy for managing travel demand that embraces the principles of sustainable transport, including public and active transport modes.

Active transport presents a number of interrelated benefits including:

- improved health benefits
- reduced traffic congestion, noise and air pollution caused by cars
- greater social connections within communities
- cost savings to the economy and individual.

A GTP is a package of coordinated strategies and measures to promote and encourage active/sustainable travel.

This GTP aims to influence the way people move to/from the proposed development site to deliver better environmental outcomes and provide a range of travel choices, whilst also reducing the reliance on private car usage, particularly single occupancy car trips.

The planning of the new development should accommodate innovative ideas to better manage the transport demand of the project. It will be necessary to introduce new measures to ensure that trips generated by the proposed development are not solely private car based, particularly single occupancy trips.

1.4 Green Travel Plan Pyramid

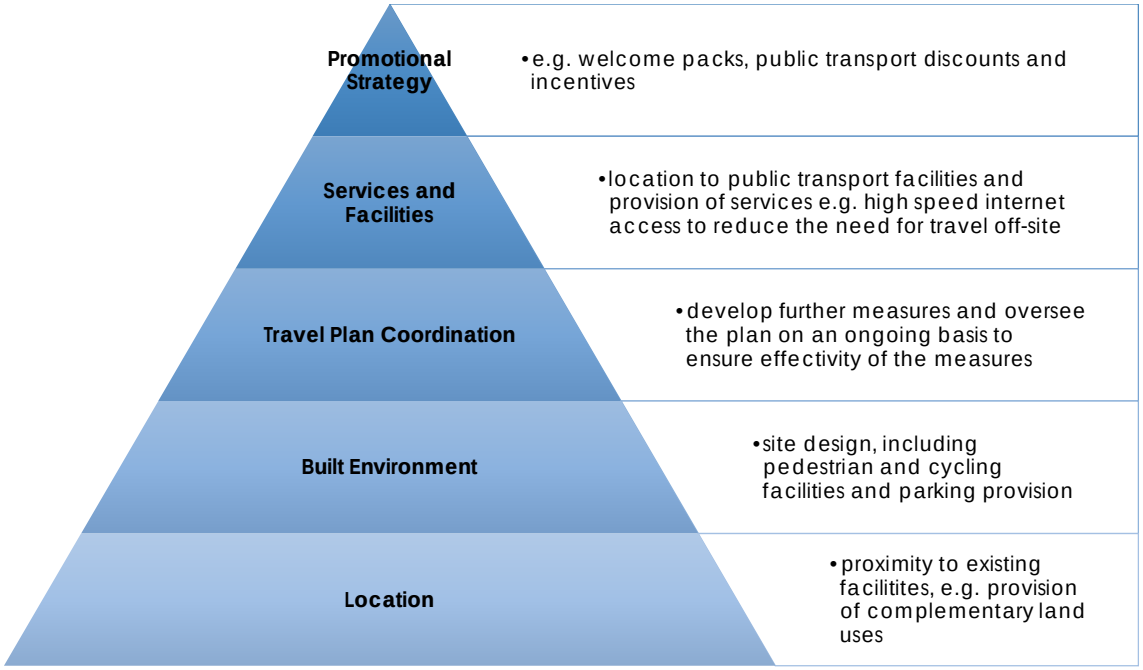
The GTP will need to be tailored to the proposed development site to ensure appropriate measures are in place for the different land uses to promote a modal shift away from car usage.

The key elements of the GTP are shown in the Travel Plan Pyramid in Figure 1.1.

Figure 1.1 demonstrates that the key foundations to ensure the success of a GTP are:

1. **Location** – i.e. proximity to existing public transport services and proximity to mixed land uses, e.g. shops and services, such that walking or cycling becomes the natural choice
2. **Built Environment** – i.e. provision of high quality pedestrian and cycling facilities, end-of-trip facilities and reduced car parking provision to encourage sustainable transport choices.

Figure 1.1: Travel Plan Pyramid



The site' location in the heart of St Leonards with an easy walking distance and access to the St Leonards transport interchange provides a solid foundation for the success of a GTP for the proposed development on the site.

1.5 Drivers of the Green Travel Plan

Further to the above, there are a number of social, environmental and economic drivers for developing and implementing a GTP for the proposed development site as detailed below.

1.5.1 Environmental Impacts

The transport sector amounts to 13.5% of greenhouse gas emissions (GHG) in Australia (Department of Sustainability, Environment, Water, Population and Communities 2011). Mitigating this impact is a key driver of the GTP.

Within Australia, GHG emissions in the transport sector have risen by 30% in the last 20 years with the greatest emissions growth coming from the use of private vehicles (Department of Climate Change and Energy Efficiency, 2011).

In comparison, travel modes such as walking and cycling have the lowest emissions while public transportation has far less impact than the private car (Dave 2011).

1.5.2 Health Benefits

The use of sustainable transport modes can have wide-ranging health benefits across the population (World Health Organisation, 2009). High levels of car-use and long commuting times are also associated with decreased physical activity and sedentary lifestyle diseases such as obesity, heart disease and type-2 diabetes (Wen et al.2006). Medibank Private (2007) estimates the cost of physical inactivity to the health care system to be $1.5 billion per year.

Active transport modes (including public transport) also provide more sustained health benefits because physical activity becomes part of everyday routine. Sustainable transport modes also improve air quality by lowering air pollution and reducing exposure to particulates, sulphates and atmospheric ozone.

A Bureau of Transport and Regional Economics (2007) report estimates that between 900 and 2,000 early deaths are caused by motor vehicle pollution in Australia each year. Reducing pollution has both environmental and health benefits.

1.5.3 Social Inclusion

Transport has a fundamental role in supporting social equity through providing access to essential amenities, employment opportunities and social and recreational goods (Lucas and Currie, 2011).

Greater levels of walking and cycling hold significant benefits in terms of equity and community cohesion (Hart 2008).

Car dependency accentuates inequalities of access amongst certain groups who are less likely to drive including the unemployed, persons on low incomes, children and young people, the aged, and persons with disabilities (Sustainable Development Commission, 2011). As such, sustainable transport modes can provide a more affordable alternative to car use.

1.5.4 Resident and Employee Attraction

Ease of access has a significant impact on choices of work and living. Negative experiences and costs associated with travel can reduce the competitiveness of a residential, commercial or retail precinct.

High quality and efficient transport systems are key to attracting and retaining staff, visitors and residential tenants. Support for active transport modes is also highly desired by employers and employees, because it improves health and productivity (Colliers International 2011).

2 Existing Transport Policy Context

2.1 Summary of Key Policy Directions

The review of existing relevant policy clearly illustrates a number of themes that should inform the approach to ongoing management of transport demand, and investment in the transport network.

These themes include:

- Provision of high quality local transport infrastructure and improved bike paths and networks and improving accessibly and connectivity
- Address car parking issues in key locations, including residential and business districts and encouraging active transport
- Create connected, liveable communities where people can walk, cycle and use public transport to promote healthier, active communities.

A summary of the existing policy framework documents is provided in Table 2.1.

Table 2.1: Summary of Policy Framework

Policy/Strategy	Key Aims/Objectives/Goals
NSW State Government	
New South Wales Long Term Transport Masterplan (NSW State Government, 2012)	The Sydney Metro project (under construction) will increase the public transport accessibility of St Leonards.
Future Transport Strategy 2056	The Strategy aims to increase the mode share of public transport services and reduce the use of single occupant vehicles. The Proposal will look to reduce private vehicle travel and aligning with the objectives of the Strategy.
Greater Sydney Region Plan: A Metropolis of Three Cities – Connecting People	The Site is ideally located to contribute towards creating a 30-minute city. The mix of uses means residents can access easily access shops and the community aspects of the site and the surrounding St Leonards Town Centre. The Site's links with public transport means there are numerous facilities including jobs, schools and hospitals, within a 30-minute travel time for future residents and the Site is within a 30-minute travel time for visitors. The Site thus aligns with the objects of the Plan.
Sydney's Cycling Future, Cycling for Everyday Transport (NSW State Government, 2013)	The Three Pillars of Sydney's Cycling Future: ▪ investing in separated cycleways ▪ providing connected bicycle networks to major centres and transport interchanges promoting better use of our existing network; and, ▪ engaging with our partners across government, councils, developers and bicycle users.

2.2 Greater Sydney Region Plans: 30-minute City

As indicated above, the Greater Sydney Commission's Greater Sydney Region Plan, the key purpose of the plan is to deliver a 30-minute city where jobs, services and quality public transport spaces are in easy reach of people's home.

However, a recent study conducted by Deloitte Access Economics found that only 75 of the 313 Sydney neighbourhoods could currently be deemed to have easy access to major job hubs and other key services within half an hour.

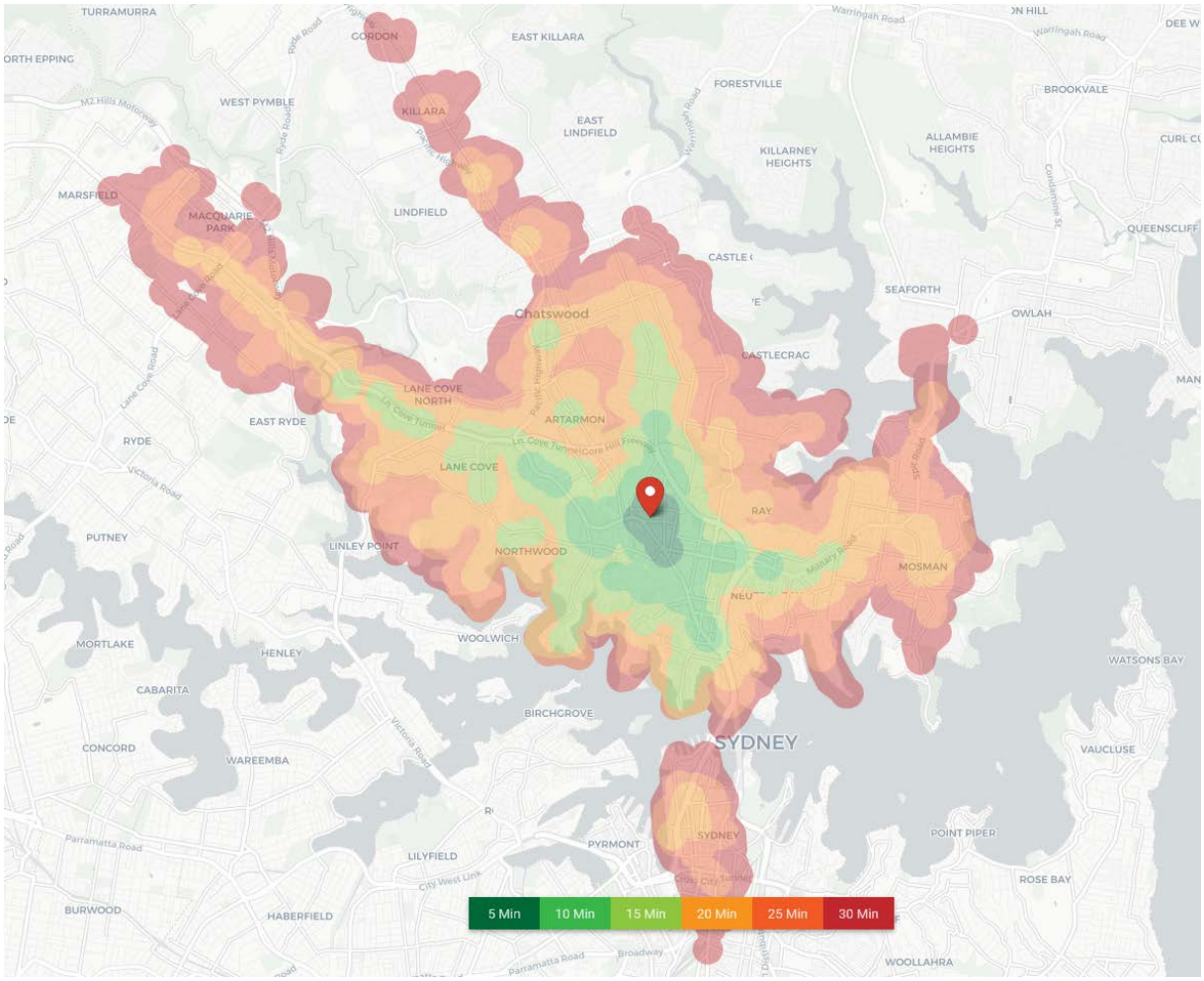
Based on the findings of the Deloitte study and work undertaken by Arup, a number of key performance criteria have been identified in order to achieve a 30-minute city:

- **Access to healthcare** – hospitals provide an important facility to many people and play a role for employment, education and training facilities. Parking is often limited at hospitals and as such, access via a variety of transport modes are required.
- **Access to retail services** – access to all forms of retail (supermarkets and specialist stores) is essential to achieve a 30-minute city. There has already been an increase in the number of mixed-use developments within Sydney to create micro-communities, which provide mixed retail services, residential, commercial and community facility uses.
- **Access to schools** – access to good schools relies on housing affordability, which also shape where teachers live. In particular, many students have good access to local schools, however some have to travel outside their catchment areas for specialist and selective schools. As such, it is important to create strong transport link are required to provide good access to local schools and connect teachers with their place of residents and work.
- **Access to further education facilities** – public transport links for TAFE and universities are vital as students and teachers often travel out of the local catchment to the educational facility as they are often located in areas with high property prices.
- **Quality of public transport facilities** –Whilst Sydney is a liveable city; it is often constrained by transport issues. As such, the provision of good quality, reliable public transport facilities are essential to achieve a 30-minute city.
- **Access to jobs** – people being able to live close to their jobs is fundamental to delivering a 30-minute city. The current Sydney CBD has the highest concentration of jobs but as found by the Deloitte study, the average one-way commute for those travelling into the CBD from outside the city is 63- minutes. The locations with the best access to jobs currently are located near to railway stations, or close to major employment centres such as the Sydney CBD.
- **Access to residents** – a way of minimising travel needs is to locate jobs and services close to where residents live.

As an indication, the site's proximity to surrounding suburbs within an ***existing*** 30-minute commute by transit is shown in Figure 2.1.

The construction of a new Metro station at Crows Nest will further enhance the area within the 30 minute commute.

Figure 2.1: 30-minute Catchment by Transit from the St Leonards Site



Source: Route360 (accessed on 13/07/18)

Figure 2.1 indicates that the site is located within a 30-minute commute to the Sydney CBD, Macquarie Park and Gordon by transit.

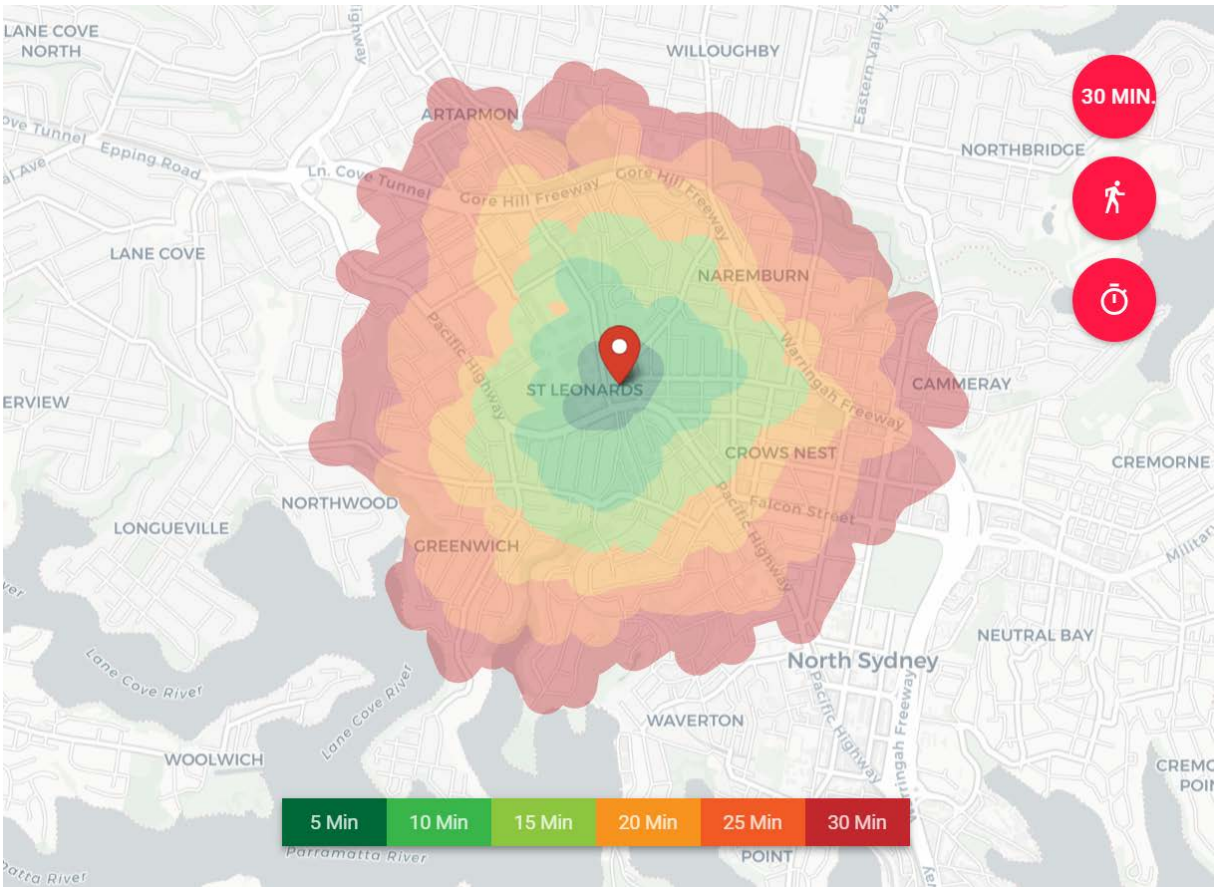
Based on this, the site is considered well located to key employment hubs with good public transport connectivity and as such, is considered to align with the key objectives of the Sydney Greater Region Plan by contributing towards the creation of a 30-minute city.

Well-established pedestrian facilities are provided within the vicinity of the site. Sealed pedestrian paths are provided on both the site's frontage to Atchison Street which provides good pedestrian access to the retail shop frontages and access to the St Leonards Transport Interchange (trains and buses).

The site is located within a 30-minute walk distance to key destinations and attractions in the area, including local cafés and restaurants, supermarket and various retail, commercial and health services with the nearby Royal North Shore Hospital precinct.

The pedestrian and cycle catchments within a 30-minute walk / cycle distance from the site is graphically shown in Figure 2.2 and Figure 2.3 respectively.

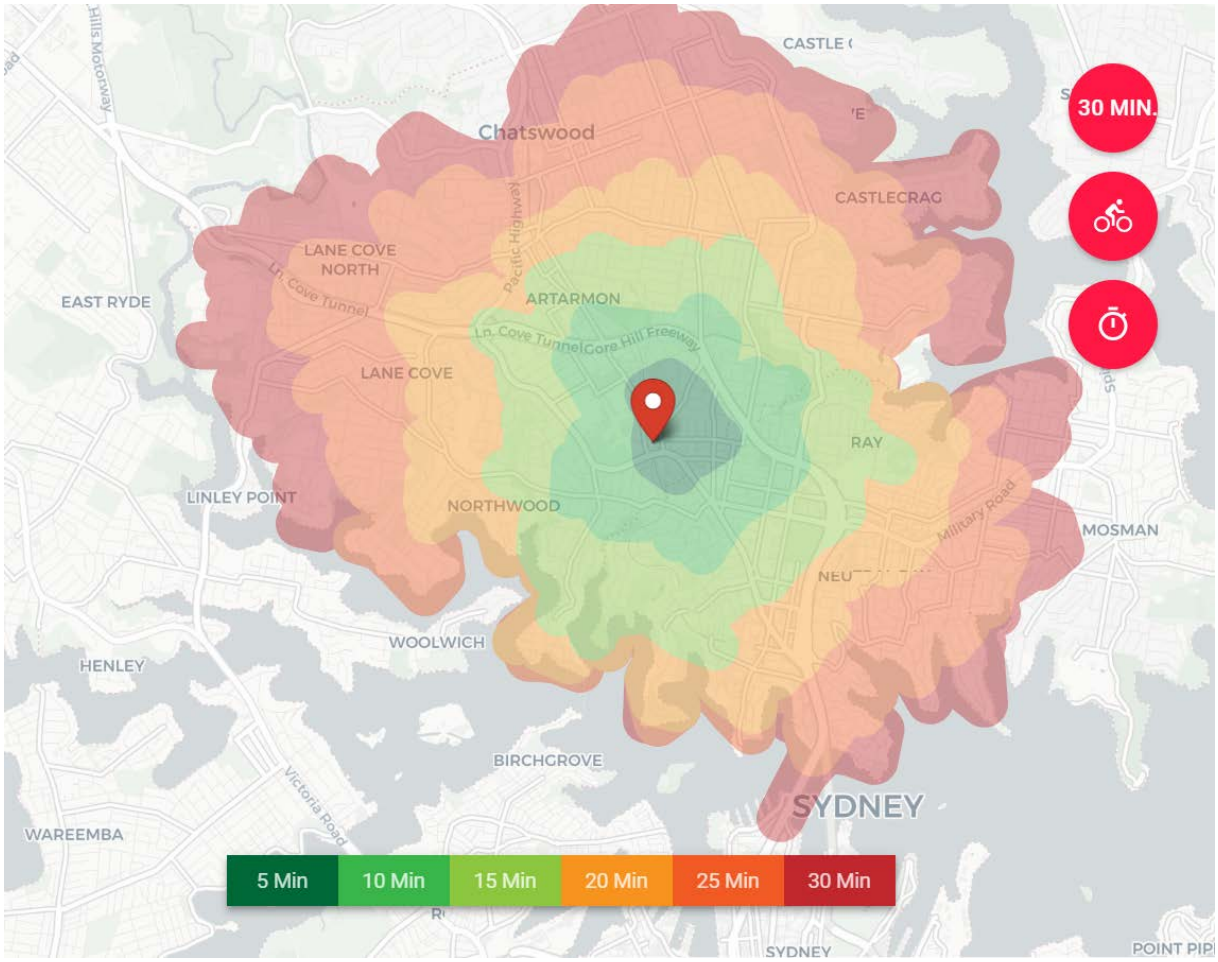
Figure 2.2: Existing Pedestrian Catchment (30-minute walk) from the St Leonards Site



Source: Route360 (accessed on 13/07/18)

The mixed use nature of the proposed development will enhance the employment, social and recreational offering to residents of St Leonards and potential reducing the need to travel outside of St Leonards to access these facilities.

Figure 2.3: Existing Cycle Catchment (30-minute walk) from the St Leonards Site



Source: Route360 (accessed on 13/07/18)

2.3 Car Share Opportunities

Car sharing is a flexible, cost effective alternative to car ownership and is a convenient and reliable way for residents to use a car when they need one. GoGet is a car share company operated in Australia, with a number of vehicles positioned within the area.

Car share is a concept by which members join a car ownership club, choose a rate plan and pay an annual fee. The fees cover fuel, insurance, maintenance, and cleaning. The vehicles are mostly sedans, but also include SUVs and station wagons.

Each vehicle has a home location, referred to as a "pod", either in a parking lot or on a street, typically in a highly-populated urban neighbourhood. Members reserve a car by web or telephone and use a key card to access the vehicle.

Notably, the City of Sydney Council has reported that *"a single car share vehicle can replace up to 12 private vehicles that would otherwise compete for local parking"*.

As such, the provision of car sharing facilities should be able to reduce both the parking demand for the site and the traffic generated by it. It is noted that the North Sydney DCP 2013 does not facilitate car share spaces within sites in St Leonards Precinct 2&3 rather indicating that they be provided on street.

Figure 2.4 shows the location of the existing GoGet vehicles within the immediate vicinity of the site.

2.4 Existing Travel Behaviour

Commuter information of employees travelling to St Leonards and residential travel from St Leonards Precinct 2&3 have been assessed based on TfNSW's 2016 Journey to Work (JTW) data.

The 2016 Journey to Work Mode of Travel is summarised in Table 2.2.

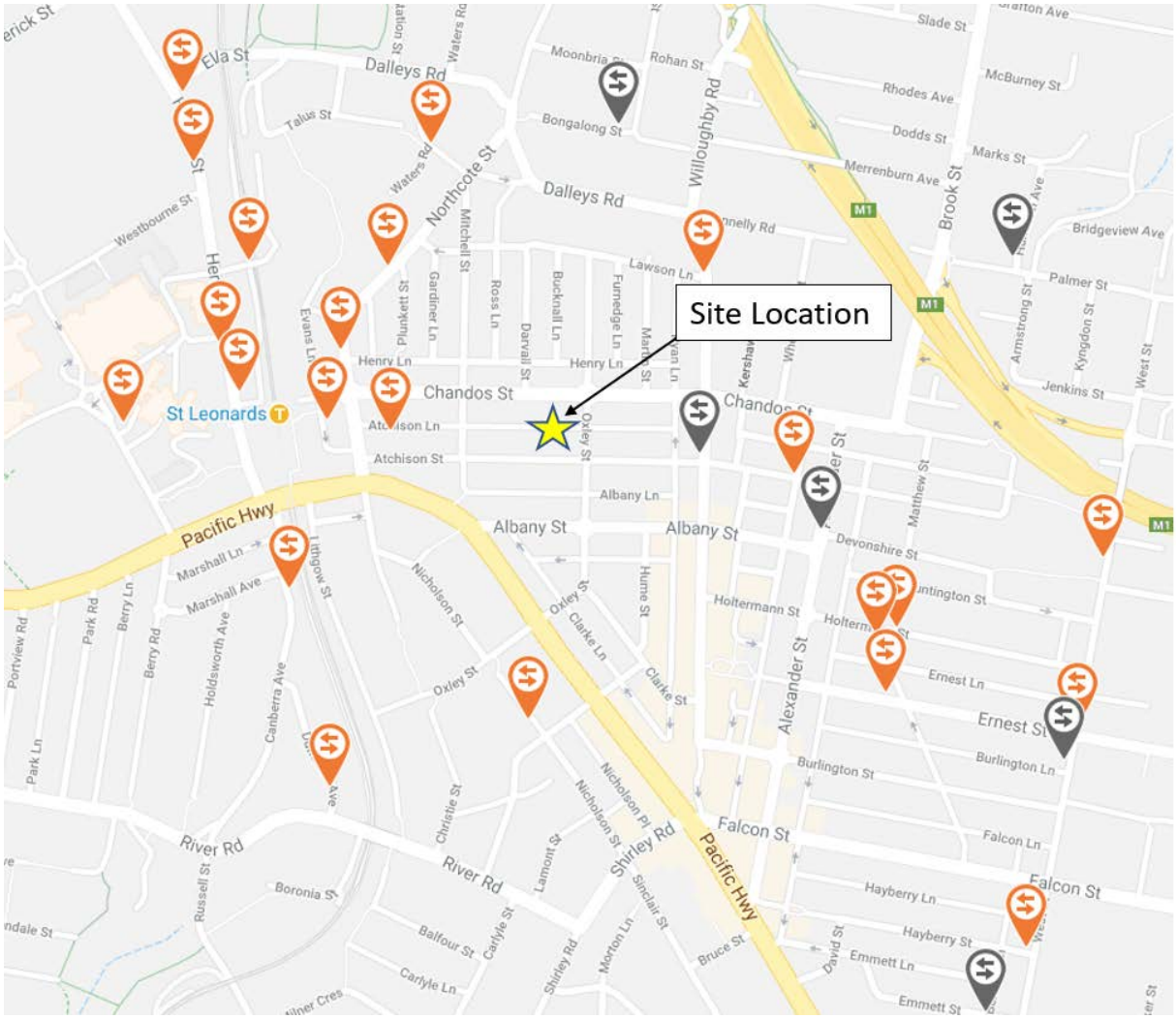
Table 2.2: 2016 Journey to Work - Mode of Travel (Primary Mode)

Column 1	Train	Bus	Taxi	Car (Driver)	Car (Passenger)	Motor bike	Bicycle	Walked	Work at Home / Didn't Work
Residential Trips From St Leonards	48%	7%	<1%	19%	1%	1%	1%	13%	9%
Employee Trips to St Leonards	39%	7%	<1%	35%	2%	1%	1%	5%	8%

The JTW data presented in Table 2.2 indicates that residential journey to work trips originating in St Leonards currently have a very low utilisation of private car travel (20%) with the primary mode being travel by train (48%). Walking (13%) also has a relatively high proportion of mode travel reflecting St Leonards trend for living near work and the availability of both employment and housing opportunities.

However, for employees travelling to St Leonards, the proportion of travel by private vehicle is significantly higher than for residents travelling from St Leonards. This is considered to be the result of available on site parking provisions for commercial (destination land use) which have occurred through historical development and higher DCP parking rates.

Figure 2.4: Location of Existing GoGet Vehicles



Source: GoGet Australia (accessed on 20/06/18: https://www.goget.com.au/find-cars/)

3 Methods of Encouraging Sustainable Travel (Modal Shift)

3.1 GTP Objectives

The following objectives have been identified in order to achieve the vision of the GTP.

Objective 1: Facilitate use of sustainable transport modes

- Improve access, safety, amenity and convenience of sustainable transport modes for travel to and from the site
- Provide incentives for sustainable travel and establish a culture of active and public transport use.
- Continue to encourage non-car based modes by limiting the convenience of car access to the site.

Objective 2: Make the site a great place to live, work and visit

- Improve access and mobility and enhance the sense of place.
- Reduce the need to travel by co-locating of complementary land uses.

To achieve the objectives of the GTP, measures will be put in place to influence the travel patterns to/from the site, with a view to encouraging modal shift away from cars.

3.2 Site Specific Measures

The following site specific measures will be implemented to encourage more sustainable travel use.

Car Parking

On site car parking rates for various land uses as set out in DCP 2013 should be applied to the development proposal. While merit based assessment is considered appropriate, it is recommended that the green travel plan objectives are best achieved through the control and minimisation of destination car parking. That is reduced or no parking for non residential uses such as commercial, retail and potentially recreational uses.

Walking

Residents, employees and visitors will be encouraged to walk through the provision of convenient and efficient pedestrian access to the site's surrounding road frontages and associated pedestrian footpaths.

Information pertaining to local shops and services within a convenient walking distance of the site will be provided to the site's users. This information would include appropriate pedestrian routes taking into consideration road crossing points (ie. Traffic signals, designated pedestrian crossings), footpath conditions and lighting.

Cycling

Provision of secure bicycling parking spaces within the basement car parking area will be provided to encourage people to undertake trips to and from the site by bicycle.

Further to this, all staff, residents and visitors will be encouraged to travel to the site by bike through word of mouth and bicycle maps and routes posted on all noticeboards, newsletters, websites etc, to promote awareness.

Public Transport

The site is located within close proximity to a range of high quality public transport services.

Public transport infrastructure will be significantly enhanced with the construction of the Metro Line and associated new Metro Station at Crows Nest (corner Pacific Highway / Oxley Street).

The provision of DCP 2013 parking rates for St Leonards Precinct 2&3 will significantly reduce the on site parking provisions for the proposed development which will increase the attractiveness of public transport as the primary mode choice for both residents and employees.

Public transport information will be provided on noticeboards in common spaces to make staff, residents and visitors more aware of the alternative transport options available. The format of the noticeboards will be based upon the travel access guide.

Car Share

The 'car share' initiative is aimed at residents and staff members who drive to / from the site to reduce car ownership and single occupancy car trips.

The development site is located within close proximity to a number of car sharing pods. It is envisaged that the number of pods in the St Leonards area will increase over time as other development occur in line with the 'planned precinct' nature of St Leonards.

Green Travel Plan Information

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

This will be included in the information pack provided to residents and staff on day one.

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, light rail stations, bus stops and walking and cycling routes.

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

TAGs 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 should be available for pick up at various locations at the site such as, at front entrances, reception and noticeboards.

Information and Communication

Connecting staff, residents and visitors with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour.

Transport NSW info

- Bus, train and ferry routes, timetables and journey planning are provided by Transport for New South Wales through their Transport Info website: http://www.transportnsw.info/

Sydney Cycleways

- City of Sydney provides a number of services and a range of information to encourage people of all levels of experience to travel by bicycle. http://sydneycycleways.net/

Additionally, such phone apps as Trip View display Sydney public transport timetable data and shows a summary view showing current and subsequent services, as well as a full timetable viewer. This timetable data is stored on the phone, so it can be used offline.

The above web links and any social media platforms may be included within the GTP/TAG.

3.3 Management and Monitoring of the Plan

3.3.1 Management and On Going Actions

There is no standard methodology for the implementation and management of a GTP. However, it is recommended that the GTP will be monitored to ensure that it is achieving the desired benefits.

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 be undertaken by a Travel Plan Co-ordinator (**TPC**), who will have responsibility for developing, implementing and monitoring the GTP. The TPC will be an appointed staff member, resident or an independent expert.

It will also be necessary to provide feedback to staff, residents and visitors to ensure that they can see the benefits of sustainable transport.

Indeed, there are several keys to the development and implementation of a successful GTP. These include:

- Communications – Good communications are an essential part of the GTP. It will be necessary to explain the reason for adopting the plan, promote the benefits available and provide information about the alternatives to driving alone.
- Commitment – GTPs involve changing established habits or providing the impetus for people in new developments to choose a travel mode other than private car use. To achieve co-operation, it is essential to promote positively the wider objectives and benefits of the plan. This commitment includes the provision of the necessary resources to implement the plan, beginning with the introduction of the *'carrots'* or incentives for changing travel modes upon occupation.

- Consensus – It will be necessary to obtain broad support for the introduction of the plan from the residents, staff and visitors.

Once the plan has been adopted, it is essential to maintain interest in the scheme. Each new initiative in the plan will need to be publicised and marketing of the project as a whole will be important.

Reviews of the GTP will be required to identify the effectiveness of implemented measures and development new / modified measures to achieve the GTP objectives.

It is recommended that travel surveys be undertaken 3-months post-occupation of the site, with this draft GTP updated accordingly to suit the site's existing modal splits and findings of the travel surveys, including opportunities and constraints to influence a modal shift away from car usage. Subsequent surveys should be undertaken after 1, 3 and 5 years.

3.3.2 Consultation

The results of the Green Travel Plan will be communicated with staff, resident, visitors and to the wider community via a website and / or newsletters.

As such, it is recommended that a summary letter is produced presenting the results of the survey within one month of the undertaking of the travel surveys (say 3-months post-occupation).

The letter/report may be also appended to the GTP and submitted to Council for comment. Subsequent surveys would be undertaken after 1, 3 and 5 years.

Communication to staff, residents, visitors and the wider community may be carried out in a similar form by public display of the GTP on the website. Alternatively, a news article on the matter could be included on the website.

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