



## FULL RESIDENTIAL TRAVEL PLAN

### **Darwin Green, Huntingdon Road, Cambridge**

Client:



**BARRATT**  
HOMES

REV C August 2023

Project No: 80047

## Document Review Sheet: -

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## **1. FOREWORD**

- 1.1. Smarter Travel Ltd (ST Ltd) has been appointed by the Developer – Barratt David Wilson Homes (BDW) – to manage, monitor and promote the Residential Travel Plan (TP) for development land north of Huntingdon Road, Cambridge known as 'Darwin Green'. The development scheme is for up to 1,593 residential dwellings including a primary school, community centre and further on-site facilities. As of this TP update there are currently 218 dwellings occupied. There are an adjacent 187 dwellings associated with David Wilson Homes which is not covered by this TP or planning requirements. The provision of this Full TP update is to continue to comply with the schedule nine, paragraph 8.9 of the Section 106 agreement of Cambridge City Council (CciC) planning approval Ref: 07/0003/OUT. The layout of the development is included in **Appendix A**.
- 1.2. A Travel Plan is defined as a long term management strategy and package of measures intended to encourage sustainable travel choices for a healthier lifestyle and reduce the reliance on the private car; this effectively requires identification and implementation of a set of interrelated measures and initiatives which will reduce the environmental impact of the travel associated with a development, particularly through the use of public transport, walking and cycling, which reflects current Government policy in respect of transport.
- 1.3. BDW are committed to the role and TP implementation and measures which are further set out in **Section 8**.
- 1.4. The Travel Plan Coordinator (ST Ltd) will promote, manage, and monitor the success of the TP and report to Cambridgeshire County Council (CCC) for the agreed monitoring period, commencing at 1<sup>st</sup> occupation and until one year after the final dwelling is occupied. The monitoring period is likely to be completed in 2032 with the principal target to have an 5% decrease in single occupancy car modal split when compared to the baseline modal split.
- 1.5. Darwin Green lies to the north western edge of Cambridge. Overall, the site is close to the city centre with numerous local amenities and public transport services as well as excellent pedestrian and cycling infrastructure to support the promotion of sustainable travel.

### ***Definitions***

- 1.6. The following definitions are used throughout this document:
- i. "Travel Plan" means a comprehensive "living" document that includes the sustainable travel objectives, targets, and commitments, which is updated, amended and supplemented from time to time under the provisions of the conditions of the planning approval and "Travel Plan Reviews" which are obliged to be undertaken by the Travel Plan Coordinator on behalf of the Developer.
  - ii. "Travel Plan Coordinator (TPC)" shall mean a permanent representative appointed by the Developer with the appropriate skills, budgetary provision and resources to produce and update

a "Travel Plan" and manage the continued implementation of the "Travel Plan" including the provision of information to the Local Authority.

- iii. "Multi-modal Survey" means a standardised annual travel survey undertaken with manual observations at each access point to identify the modes of travel used by the residents and to determine vehicular generation and additionally pedestrian and cyclist movements in and out of the development.
- iv. "Annual Travel Plan Review" means a report every year including the results and analysis of the "multi-modal survey" and the "postal/online survey" (as and when required) indicating how the "Travel Plan" is performing and updating the document as necessary to reflect changes in local area accordingly.
- v. "Monitoring Period" means the time period that the Developer is committed to fund and manage the "Travel Plan" and "Travel Plan Coordinator" to review travel behaviour to / from the site with an aim to reduce private car usage in favour of sustainable modes with reporting to the "Local Authority" via the "Annual Travel Plan Review" for approval. The monitoring period is due to commence at 1<sup>st</sup> occupation through to one year post final occupation.
- vi. "Local Authority" shall mean the relevant district council or county council required to approve the Travel Plan.



## 2. INTRODUCTION

2.1. The development is not only residential, but also includes a school and a community centre to be built on future phases (these will be covered by alternative Travel Plan documents), which will substantially reduce school travel distance and time as well as potentially reducing traffic in and out the development. The TP is therefore an important tool in helping to deliver sustainable communities. This will bring several benefits into the local area, including:

- i) Reducing the need to travel by private car and aim to cut congestion to and from Darwin Green.
- ii) Increasing awareness of sustainable travel alternatives to the private car.
- iii) Promotion of social inclusion and interaction by identifying that a wide range of transport options are easily available for new residents, including those with disabilities, and that existing amenities are accessible.
- iv) Helping to reduce greenhouse gas emissions by accommodating those journeys that need to be made by car through information on greener car travel usage. This will aid in addressing the increased emphasis of tackling climate change and reducing impact on the local environment.
- v) Residents can enjoy improved health, less stress and better quality of life through the increased use of walking, cycling and public transport use. Financial savings over the ownership and running costs of a private car can also be achieved through providing a greater travel choice.
- vi) Bringing new choices of modes of transport to the wider community with the promotion of a car sharing scheme.

2.2. This TP has been prepared with reference to current CCC and Department for Transport (DfT) guidance documents "Using the Planning Process to Secure Travel Plans" (April 2009); "Making Residential Travel Plans Work: Guidelines for New Development" and "Good Practice Guidelines: Delivering Travel Plans through the Planning Process" (April 2009).

2.3. This TP will highlight any policy considerations in relation to Darwin Green. Additionally, a local accessibility audit has been undertaken, which includes public transport options, walking and cycling and other sustainable travel options. Objectives and targets are set out in **Section 7** with details of all measures that will be implemented to encourage sustainable travel behaviours.

### **3. POLICY CONSIDERATION**

#### ***National Planning Policy Framework (NPPF)***

- 3.1. The NPPF and the DfT guidance, referred to in **Section 2**, identifies that the provision of a Travel Plan will help to deliver more sustainable transport objectives, including:
- Reductions in car usage (particularly single occupancy journeys) and increased use of public transport, walking and cycling;
  - Reduced traffic speeds and improved road safety and personal security, particularly for pedestrians and cyclists; and
  - More environmentally friendly delivery and freight movements, including home delivery services.

#### ***Regional***

- 3.2. The Cambridgeshire Local Transport Plan (2015) covers the period 2011-2031 and sets out the local transport strategies and policies across the whole of Cambridgeshire. This document sets out the County Councils vision and strategy for long term development of transport up to 2031.
- 3.3. The plan identifies how transport will play its part in supporting and facilitating future sustainable economic growth in Cambridgeshire by:
- Making the best use of what we have to facilitate reliable journeys;
  - Reducing the need to travel; and
  - Influencing others and ensuring transport is integrated into development plans.
- 3.4. The Cambridge City Local Plan (2018) includes for Policy 81: 'Mitigating the transport impact of development' and Policy 80: 'Supporting sustainable access to development' and state that Developments will only be permitted where they do not have an unacceptable transport impact and prioritise access by walking, cycling and public transport. The policies state:

Requirements for a Transport Assessment in accordance with CCC guidance to assess transport impact;

- Need for a Travel Plan to accompany all major development proposals;
- Reasonable and proportionate financial contributions/mitigation measures to make the transport impact of the development acceptable and encourage the use of sustainable modes of transport;
- Major development on the edge of cities are supported by public transport links to the city centre and be within walking/cycling distance;
- Prioritising walking/cycling and public transport modes as well as accessible travel;

- 3.5. The development lies within the Local Plan Policy 19: 'West Cambridge Area of Major Change' with land allocated for educational and commercial use and small-scale community facilities provided. Darwin Green will provide an on-site school and community facilities at a later phase of the development to support Policy 19 of the Local Plan.



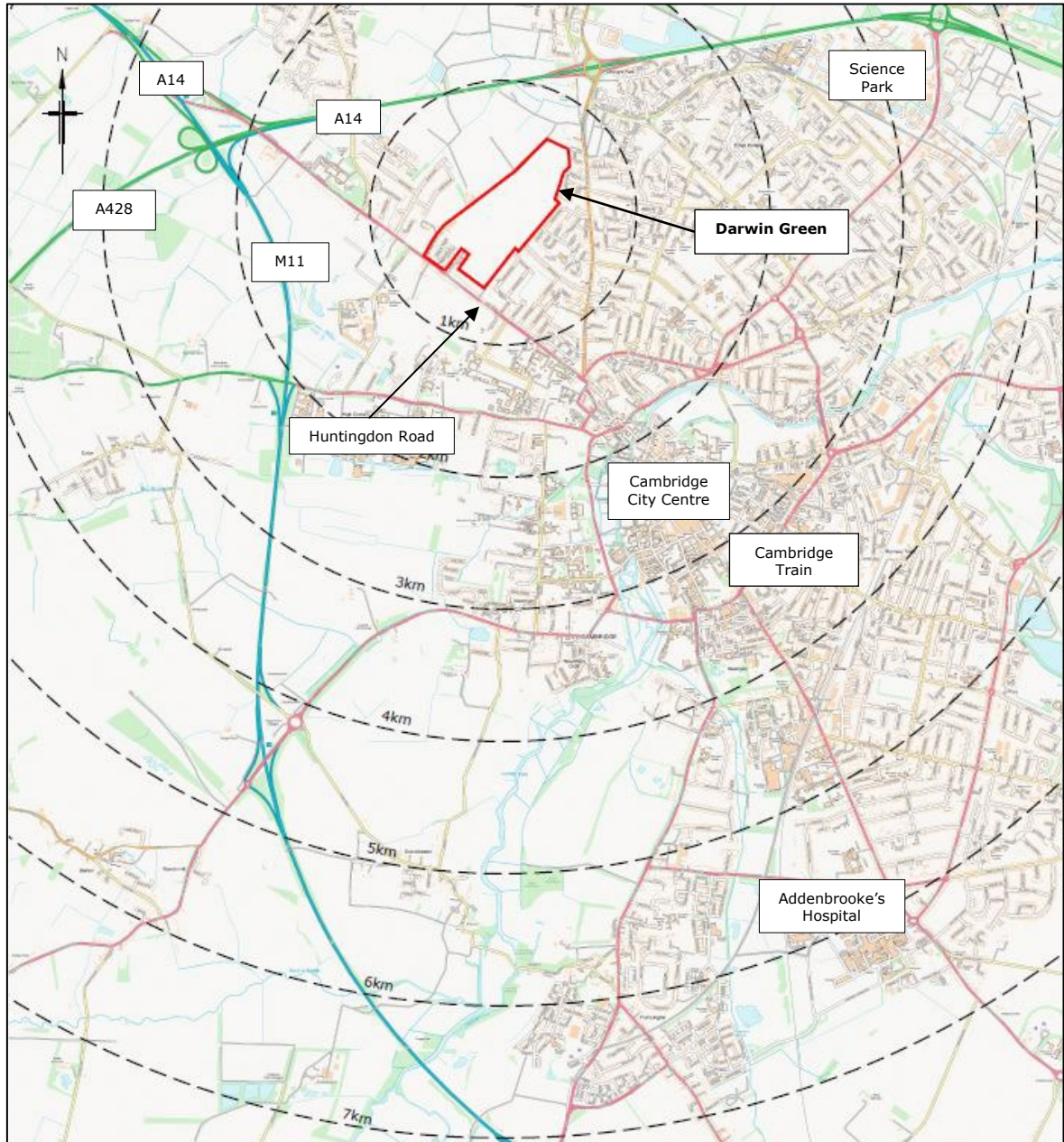
**4. EXECUTIVE POLICY STATEMENT**

- 4.1. BDW has agreed to the following TP arrangements. These demonstrate the importance of the environmental and health benefits of increasing the use of more sustainable modes of travel, as an alternative to the private car. BDW is committed to developing and funding this programme, with the support of a TPC, and delivery of measures set out herein to achieve the monitoring targets whilst supporting change in travel habits of residents of this development.
- 4.2. The Developer will be responsible for the ownership of the residential TP for this development for a period of no shorter than 10 years from the date of the approval by CCC of the interim TP. It is therefore expected that the monitoring period is to end no earlier than 2032.
- 4.3. The appointed TPC can delegate responsibilities to others to assist in the operation and monitoring of the TP. The contact details are set out below. Should the contact details of the TPC change at any time during the monitoring period the following details will be amended accordingly and advised to CCC within two months.

<b><i>Acceptance and Commitment to the Role of Travel Plan Coordinator</i></b>
Name: Elizabeth Evans Company: Smarter Travel Ltd Telephone: 01603 230240 (Mon – Fri; 0900-1700) Email: <a href="mailto:DarwinGreen@SmarterTravel.uk.com">DarwinGreen@SmarterTravel.uk.com</a> Website: <a href="http://www.DarwinGreenTP.co.uk">www.DarwinGreenTP.co.uk</a> Date: 10 August 2023 On behalf of: BDW Trading Limited
<b><i>Developers Representative</i></b>
Name: Chris Fry Company: BDW Trading Limited Date: 11 <sup>th</sup> July 2022

**5. LOCAL ACCESSIBILITY AUDIT**  
***Darwin Green Location***

- 5.1. Darwin Green is located to the north of the A1037 Huntingdon Road, Cambridge. It lies approximately 40 km west of Bury St Edmunds, 46 km south of Peterborough and 40 km east of Bedford. Cambridge city centre is approximately 2.4 km to the south of Darwin Green. The location of Darwin Green is shown in **Figure 1** below.



**Figure 1. Darwin Green Location**

- 5.2. The A14 runs to the north of Darwin Green, which can be accessed from the B1049 Histon/Cambridge Road east of the site. The A14 can be used east to Newmarket and Bury St Edmunds or west to the M11, which provides further links to Stansted Airport and London.

- 5.3. The current vehicular access to Darwin Green is off Huntingdon Road via a signal-controlled junction. More information about vehicular access to the site can be found in **Section 6**. A site layout can be found in **Appendix A**. Additional vehicular and non-vehicular accesses will be available on future phases of the development including a secondary vehicular access to the B1049 Cambridge Road, which is currently open for construction vehicle traffic only.

#### ***Pedestrian and Cycle Network***

- 5.4. Darwin Green has good access for pedestrians and cyclists to the centre of Cambridge which provides access to local amenities including schools, shopping and employment areas.
- 5.5. The Travel for Cambridgeshire Partnership is also involved with the development of a Local Travel Plan Network (LTPN) for the Cambridge Science Park. The Science Park is likely to be a key destination of Darwin Green residents due to its 2km distance to the east.
- 5.6. The site lies to the northwest of an existing residential area with good pedestrian/cycle facilities that connect with the city centre and the local area. Both Histon Road and Huntingdon Road have good facilities for pedestrians/cyclists, with footways and dedicated cycle lanes on both sides of the road and crossing facilities along the routes from the site's access south to the city centre.
- 5.7. 2011 Census Data highlights that a large percentage of the population of Castle Ward, to which most of the site lies within, work in the centre of Cambridge with short distances to commute, ideal by either foot or bicycle.
- 5.8. A review of 2011 Census Data for the Castle Ward of Cambridge shows that cycling for commuting purposes is high. This is discussed later in this TP.
- 5.9. National Cycle Route 24 passes the site access and follows Huntingdon Road connecting to National Cycle Routes 11 & 51. National Cycle Route 51 connects Oxford, Bedford, Cambridge, Ipswich and Colchester. National Cycle Route 11 connects Ely with Bishop's Stortford. These routes and connections are shown on the Cambridge Cycle Map in **Appendix B**.
- 5.10. Huntingdon Road is a popular cycle route into Cambridge City Centre with up to 280 cycles an hour in the peak direction (about 20% of total movements). The Cambridge Cycle Map is available on the Cambridge City and Cambridgeshire County Council websites and shows the cycle routes across the city and illustrates that both Histon Road and Huntingdon Road are signed primary network routes, running directly into the city centre.
- 5.11. There is a cycle shop (Chris's Bikes) located 750m from the site access, in Thornton Way in addition to a number of other cycle shops in Cambridge. Outspoken Cycles provide a cycle store, cycle workshop, and cycle training and are located 6.5km (equivalent 22-minute cycle) from the site's access.
- 5.12. Cambridge has extensive cycle parking options, including cycle parks located at the Grand Arcade and Park Street, both in the city centre. The Grand Arcade provides space for over 200 cycles in a variety of cycle racks and

lockers. For those that wish to cycle into Cambridge City Centre with young children, a pushchair can be borrowed when using Grand Arcade and Park Street cycle parking.

- 5.13. Cycling to Cambridge train station is a relatively straight forward journey with the train station being located to the south of Darwin Green, the other side of the city centre. Residents would need to follow Huntingdon Road towards the city, then join the A1307 until they reach Station Road.
- 5.14. **Figure 1** shows the 5km catchment area, demonstrating the area which is within a reasonable cycling distance from the site (a 5km journey would take approximately 20 minutes). The entire city centre is within this catchment, including many other surrounding villages and areas that host popular transport links.

### **Public Transport**

- 5.15. The current closest bus stops to the development are located on Huntingdon Road either side of the site access with a further bus stop located just south of the site's secondary access onto the B1049 Cambridge Road and further stops located via a proposed site link to Brownlow Road.
- 5.16. Bus service 5 from Stagecoach in the Fens (Citi) runs through the Huntingdon stops linking the site to Longstanton and service 6 from Stagecoach in Cambridge (Citi) connects to Oakington. Additional bus services 8 and 8A from Stagecoach can be taken from the B1049 stops and link the site to Cottenham. Bus stops either side of the access include a flagpole and road markings, and the eastern stop has a bus shelter with real-time bus information panels.
- 5.17. **Table 5.1** below presents the regular current services and times with services 5 and 6 from Huntingdon Road. Local bus timetables for services are included in **Appendix C**.

**Table 5.1 – Nearest Local Regular Bus services**

<b>Operator</b>	<b>Service</b>	<b>Frequency</b>
Stagecoach in the Fens (Citi)	<b>5</b> Cambridge – Bar Hill – Longstanton	<b>Mon to Sat:</b> Every 30 mins <b>Sun:</b> Every hour
Stagecoach in Cambridge (Citi)	<b>6</b> Cambridge City Centre – Girton – Oakington	<b>Mon to Sat:</b> Every 30 mins <b>Sun:</b> Every hour
<b>Additional Services from B1049 Histon/Cambridge Road</b>		
Stagecoach in Cambridge (Citi)	<b>8</b> Cambridge City Centre – Cottenham	<b>Mon to Sat:</b> Every 30 mins <b>Sun:</b> Every 30 mins
Stagecoach in Cambridge (Citi)	<b>8A</b> Cambridge City Centre – Histon Road – Orchard Park	<b>Mon to Sat:</b> Every 30 mins <b>Sun:</b> Every 30 mins

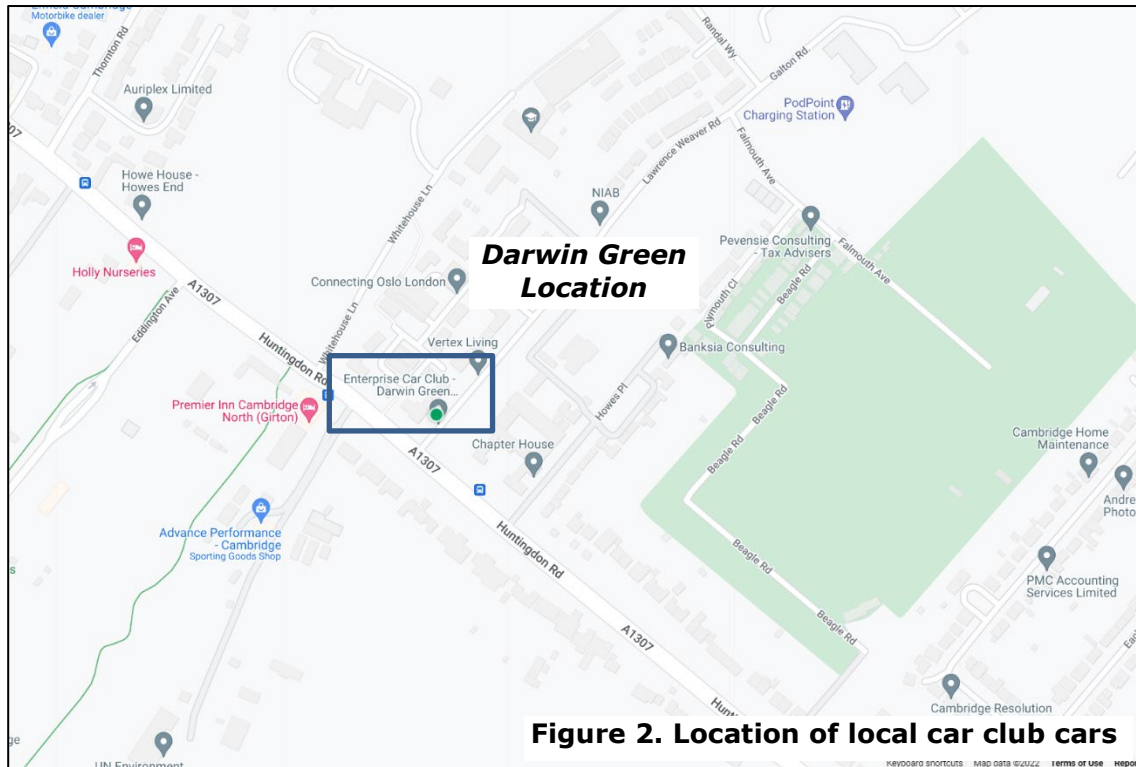
*Bus services correct as of August 2023.*



- 5.18. Up to date timetable information for each bus stop can also be obtained via the websites of each operator or via Traveline website. Links to updated timetables will be promoted to residents.
- 5.19. The site is well served by buses, with stops within a 400-metre walk of the development access point providing regular and frequent bus services. The proposed development will seek to improve bus servicing by diverting buses through the site, discussed in detail later.
- 5.20. At least four buses per hour run along Huntingdon Road in each direction, to and from the city centre as the Citi 5 and 6 services. Connections to other bus services, including high frequency links to Cambridge rail station, can be made in the city centre.
- 5.21. A review of 2011 Census Data for the Castle Ward area shows that currently the use of bus services is low for commuter purposes. This is discussed further later in this TP.
- 5.22. An adult day ticket for Stagecoach services within Cambridge (covering Darwin Green) is £4.50 and can be purchased either on the bus or through the Stagecoach website or mobile app. Additionally there are a variety of discounted season tickets available including monthly options. All prices correct as of August 2023.
- 5.23. Stagecoach also provides a useful travel app for mobiles with live bus times, and location based search where buses, stops and routes can be found instantly. The app includes a journey planner; ticket options; walking directions; disruption updates; and mobile tickets and payments.
- 5.24. Community transport options are also available to residents that may have need for these services and have difficulty accessing regular transport services. The charitable organisation Cambridge Dial-a-Ride is available within the area. Further information can be found on their website (<https://cambridgedialaride.org.uk/about-us/>).

### **Car Club**

- 5.25. Car club opportunities are also available from nearby the site. Enterprise operates in the Cambridge area working in partnership with CCiC to provide car clubs on-street to residents. There are currently 31 vehicles in the city and over 1,500 members. **Figure 3** highlights the Car Clubs that are placed within the Darwin Green site.



### Train Services

- 5.26. The closest Train Station from Darwin Green is Cambridge Train Station to the southeast approximately 4km from the site or 15-minute drive (as shown in **Figure 1**). Cambridge Train Station offers links to London, Ipswich, Ely, Norwich, and Peterborough. The station features 374 car parking spaces, with 14 accessible spaces, and 2,850 cycle parking spaces. The car park is operated by National Car Parks Limited and has a daily rate of £12.50 or £48.00 weekly.
- 5.27. Cambridge train station also provides links to Great Northern, Thameslink and Cross Country train services to London King's Cross, Stansted Airport and Birmingham via Peterborough.
- 5.28. The current season and day ticket cost of train services to London and Norwich should be promoted to the future residents as well as the available railcards that can be obtained that can reduce off-peak train travel costs by up to 33%. The PlusBus ticket option will also be promoted as a way to get discounted bus travel at train destinations such as Cambridge, Bury St Edmunds, Ipswich and Colchester, which is likely to be taken up for leisure related journeys.
- 5.29. Cambridge station is included within the 5km catchment of the site, facilitating the option for residents to make multi-modal, sustainable journeys.
- 5.30. A review of 2011 Census Data for the Castle Ward area shows that currently the use of the train is very low for commuter purposes. This is discussed further later in this TP.



### Local Amenities

- 5.31. The Institution of Highways and Transportation in its publication "Guidelines for Providing for Journeys on Foot" (2000) suggests that an average walking speed of 1.4 m/s can be assumed. The DfT's document LTN 1/86 "Cyclists at Road Crossings and Junctions" recommends that an average cycling speed of 4m/s can be assumed.
- 5.32. Although now superseded by the NPPF, the widely accepted Government's document "Planning Policy Guidance 13: Transport" stated that *"walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres."* The same document also stated that *"cycling also has potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport."*
- 5.33. Large local employment areas in Cambridge include: Cambridge Science Park and Cambridge Business Park, located east of the site, and Clifton Road Industrial Estate, located southeast of the site. Additional employment areas can be located within the city centre of Cambridge and at Addenbrookes Hospital, Cambridge University, Anglia Ruskin University, Cambridge Biomedical Campus and Cambridge International Airport. All could be accessed using footways and cycleways and 20/30mph speed restricted roads from Darwin Green where possible.
- 5.34. The closest supermarkets to the development are Iceland Foods store and Aldi supermarket located on Histon Road (1.7 km or a 20 minute walk). Further, a Sainsbury's superstore is located to the southwest of Darwin Green on Eddington Avenue (0.8 km or a 10 minute walk). All are accessible by both foot and bicycle. Additional supermarkets are located to the south of the site to the centre of Cambridge.
- 5.35. Local schools within Cambridge include: University of Cambridge Primary School, Mayfield Primary School and St Luke's Church of England Primary School. The two closest public secondary schools to the site include: North Cambridge Academy and Parkside Community College which is a part of Cambridge Academic Partnership. All schools are accessible via pedestrian and cycle links within Cambridge. A Primary School will be located within the Darwin Green development in a future phase and will be covered by a different TP.
- 5.36. Focusing upon the site, **Table 5.2** presents a range of local amenities in the surrounding areas, with the appropriate distance and travel time from the site.

**Table 5.2 – List of Nearest Local Amenities**

<b>Amenity</b>	<b>Name</b>	<b>Location</b>	<b>Distance from the site*</b>	<b>Walking / Cycling time</b>
Public House	Beefeater Travellers Rest	Huntingdon Road, CB3 0DL	0.8 km	9 mins / 3 mins
Bus Stops	'Lawrence Weaver Road' stops	Huntingdon Road	0.8 km	9 mins / 3 mins
Supermarket	Sainsburys	Eddington Avenue, CB3 1SE	1.6 km	19 mins / 6 mins
Place of Worship and Community Centre	St Augustine's Church, Hall and Community Centre	Richmond Road, CB4 3PS	2.0 km	24 mins / 8 mins
Doctors	Huntingdon Road Surgery	Huntingdon Road, CB3 0DB	2.1 km	25 mins / 8 mins
Recreation Ground	Histon Road Recreation Ground	Histon Road, CB4 3QE	2.1 km	25 mins / 8 mins
Primary School	Mayfield Primary School	Warwick Road CB4 3HN	2.3 km	27 mins / 9 mins
Post Office	Histon Road Post Office	Histon Road, CB4 3HL	2.4 km	28 mins / 10 mins
Bus Stops	'Brownlow Road' stops	Histon Road	**3.0 km	36 mins / 12 mins
Nursery	Ardbury Pre-School	Arbury Primary School, CB4 2DE	3.2 km	38 mins / 13 mins
Dentists	Green Tree Dental	50 Metcalfe Road, CB4 2DD	3.2 km	38 mins / 13 mins
Sports	Chesterton Sports Centre	Gilbert Road, CB4 3NY	3.4 km	40 mins / 14 mins
High School	Parkside Community College	Parkside CB1 1EH	4.1 km	48 mins / 17 mins
Employment Areas	Darwin AZ Science Park	Milton Road CB4 0GQ	4.4 km	52 mins / 18 mins
Hospital	Addenbrookes Hospital	Hills Road CB2 0QQ	7.2 km	86 mins / 30 mins

\*Distances taken from centre of the site via public highway only.

\*\*The shorter link through to Brownlow Road is currently unavailable.

- 5.37. In conclusion, the development is very well located to a great number of amenities which are accessible on foot or by bicycle. Further to this the site is located approximately 3 km from Cambridge City Centre where a wide variety of further amenities and services are located.
- 5.38. The excellent range of amenity provision in the city and local area should influence the residents of Darwin Green to use more sustainable modes of transport to travel locally when possible, reducing the impact of unsustainable travel in the area. Furthermore, more facilities will be available within Darwin Green including a community centre, school/childcare facility, sports pavilion, and healthcare centre which will eliminate the need to travel further afield.

***Barriers to Sustainable Travel and Accessibility***

- 5.39. The potential issues and barriers to the promotion of sustainable travel in association with the site and its locality have been identified as follows:
- Lack of knowledge about public transport links within the site vicinity;
  - The likelihood of residents undertaking shift work or working irregular hours;
  - Lack of knowledge of potential car sharing and car club opportunities;
  - Perceived high cost of public transport compared to driving;
  - Perceived inaccessibility to Cambridge City Centre and train station on foot or by bicycle;
  - Perceived poor quality of facilities (shelters / seating etc.) at bus stops and train station;
- 5.40. The measures and initiatives proposed within this TP will seek to address the identified issues and barriers to sustainable travel and will be fully supported by BDW for the monitoring period.

***Annual Inspection (off-site)***

- 5.41. During the monitoring period, at least an annual inspection shall be made prior to each survey by the TPC to review the condition of local footways, cycleways and local bus shelters off-site to identify any maintenance issues that could be detrimental to the promotion of sustainable travel. Any maintenance issues seen can then be reported to the relevant department at the Local Authority for remediation and be reported in monitoring reports or TP reviews.
- 5.42. At the time of the 2023 site visit (May 2023), no issues were reported.

## **6. DARWIN GREEN DEVELOPMENT**

- 6.1. Darwin Green consists of a total 1,780 dwellings of which 187 homes developed by David Wilson Homes are excluded from this TP. This TP only covers 1,593 residential dwellings and further non-residential uses will be covered by separate TPs. At least 40% of these residential dwellings will be classed as 'Affordable Homes' and will be managed by affordable homes operator, London & Quadrant Housing Trust.
- 6.2. Car parking is provided at 1.5 spaces per dwelling. Additionally, a car club scheme has been provided on-site. Two cars have been provided near the Local Community Centre area to the site frontage. A further three cars will be provided in later phases of development.
- 6.3. It is expected that the build out rate will be between 100 and 200 dwellings per year. Darwin Green will be built over several phases with BD1 consisting of 173 dwellings. It is expected that a further 114 dwellings will be constructed in 2022/23 as part of the Local Centre and this will include a community / local centre. As of this TP update, 218 dwellings were occupied and the community centre is unconstructed. BD2 will commence in 2023 and will consist of approximately 320 dwellings.
- 6.4. Suitable broadband provisions will be made throughout the development to assist working from home arrangements.
- 6.5. The Office for National Statistics website has been used to estimate the number of people that could potentially live in the development. The "Key Figures for 2011 Census" for "Cambridge 002C", "Cambridge 005A" and "Cambridge 005B" (site is close to these three boundaries) has given the breakdown of number of people living per dwelling: 4,174 people living in 1,843 households; using this data it has been forecasted that a development of 1,593 residential units has the potential to accommodate 3,608 people.

### **Access**

- 6.6. Initially there will be only one vehicular access to Darwin Green; and that is from Huntingdon Road. As the development of the site progresses, another vehicular access will be made available at the north of the site. During the development of Darwin Green, construction traffic access the site from an access point to the north off Cambridge Road.
- 6.7. At the time of this TP update, one vehicular access point is available and one additional pedestrian/cyclist access point is available which links to Whitehouse Lane and Huntingdon Road.

### **Public Transport**

- 6.8. A bus service connecting the development with the city centre will be provided through the site and will run at a frequency of every 15-30 minutes. Bus stops will be located to ensure that a bus stop is within 400 metres (5 minute walk) of every dwelling of the development. Further updates will be provided as this comes to fruition as this will be undertaken by CCC via a S106 contribution. As of this TP update, the bus service is currently unavailable.

***Annual Inspection (on-site)***

- 6.9. During the monitoring period, an annual inspection shall be made prior to each survey by the TPC to review the condition of on-site local footways and cycleways to identify any maintenance issues that could be detrimental to the promotion of sustainable travel. Any maintenance issues seen can be reported to the relevant department at the Developer / or Local Authority for remediation and be reported in monitoring reports or TP reviews.
- 6.10. At the time of the site visit in May 2023, no issues were to be reported. However, following the visit there have been several reports of cars parked within cycle lanes. This information has been shared with the developer and updates will be provided to residents as and when possible. This may be able to be managed by parking enforcement.

## 7. OBJECTIVES AND TARGETS

- 7.1. Baseline travel data was produced in the 2012 SKM Colin Buchanan Residential Travel Plan that supported the planning application. Household travel surveys were undertaken in the north of Cambridge (Woodhead Drive area). Modal split rates were identified as per below in **Table 7.1**. This formed the basis of the planning officer's decision to emphasise single occupancy vehicle use should not exceed 39%.

**Table 7.1 – Method of Travel to work – Baseline Survey**

<b>Mode of Transport</b>	<b>Percentage</b>
Train	1%
Bus	8%
Taxi or minicab	1%
Driving a car or van	39%
Passenger in a car or van	13%
Motorcycle, scooter or moped	1%
Bicycle	22%
On foot	15%
<i>Total commuting</i>	<i>100%</i>

- 7.2. The above table shows that 37% of the commuting is undertaken by cycling and walking, and a further 9% of the commuting is undertaken by public transport.
- 7.3. Furthermore, 2011 Census Data highlights that people commuting from this area of Cambridge by single occupancy car journeys are travelling locally to areas within Cambridge. These locations are very accessible by public transport or walking / cycling from Darwin Green, and this will be strongly promoted to future residents.

### **Objectives**

- 7.4. The main objectives that the implementation of a TP is intended to help fulfil are as follows;
- To reduce the number and proportion of single-occupancy car journeys to and from Darwin Green.
  - To raise awareness of the availability of relevant and feasible alternatives to single-occupancy car travel and the financial, health and environmental benefits of using the alternative modes.
  - To encourage and incentivise car drivers to try an alternative mode of travel and then to sustain this new travel behaviour.
  - To promote the Smarter Travel for Cambridgeshire initiatives available across the city and Cambridgeshire and to enable and support effective partnership working between local authorities, community groups, schools and other stakeholders for mutual benefit.



### Targets

- 7.5. Targets should be Site-specific, Measurable, Achievable, Realistic and Time-related (SMART). They may be phased year on year and can be by 'aim' type (e.g., percentage using non-car modes by....) or 'action' type (e.g. appoint a TPC by....).
- 7.6. The "aim type" Travel Plan targets are quantifiable and are given over two timescales: short-term (within one year) and long-term (within five years). The suggested key targets are based on the principal objectives of the TP and are as follows:
- Within three years of implementation of the full TP, decrease the single occupancy vehicle journeys by 2% when compared to the data shown in **Table 7.1**.
  - Within five years of implementation of the full TP, decrease the single occupancy vehicle journeys by 5% when compared to the data shown in **Table 7.1**.
  - Retain the car trip rates seen at year five of implementation of the full TP when compared to that identified in **Table 7.1**.
- 7.7. A review of targets should be agreed between BDW, the TPC and CCC at the baseline survey which will be undertaken following each Travel Plan update.
- 7.8. Additional "aim-type" targets that are not directly related to travel mode are as follows:
- 25% response rate on postal/online surveys of residents.
  - 80% of dwellings should be aware of the TP and TPC and the services that can be provided.
  - 50% of the dwellings will have obtained a Personal Travel Plan provided by the TPC.
  - 15% of the dwellings of the development should have used either their bus ticket or active travel voucher.
  - 25% average utilisation of the car club (on-site).
- 7.9. Following the 2022 monitoring, the "aim-type" targets have been amended in accordance with SMART principals and they are deemed more realistic, the revised targets are:
- 20% response rate on postal/online surveys of residents.
  - 60% of dwellings should be aware of the TP and TPC and the services that can be provided.
  - 30% of the dwellings will have obtained a Personal Travel Plan provided by the TPC.

- 15% of the dwellings of the development should have used either their bus ticket or active travel voucher.
- 25% average utilisation of the car club (on-site)

7.10. The “action-type” TP targets are non-quantifiable targets and take the form of actions that need to be achieved by a specified date. These targets are based on implementing the measures specified in **Section 8** and therefore aid in meeting the “aim-type” targets and the principal objectives of the TP.

***Remedial Measures and Triggers***

- 7.11. After each multi-modal survey the TPC will assess if the targets are being achieved. Should the targets not be to the SMART principles then a review of achievable, realistic targets will be undertaken and submitted to the Local Authorities with supporting evidence to be agreed.
- 7.12. If the agreed targets are not being met after the final year of monitoring, an additional year of monitoring will be undertaken including further promotion of the sustainable travel measures highlighted in **Section 8**.

## **8. RESIDENTIAL TRAVEL PLAN MEASURES**

- 8.1. The timescale for the implementation of measures is presented in a table included within **Appendix D**. The table details when measures will be put in place during the agreed monitoring period and an indication of the potential utilisation of the overall TP budget.
- 8.2. A Travel Plan Coordinator has been appointed to manage, review, and monitor the Travel Plan. The responsibilities and appointment of the Travel Plan Coordinator are detailed in **Section 9**.

### ***On-site Accessibility***

- 8.3. It is essential to ensure that pedestrian and cycle routes are safe and accessible. The site layout is designed to respect the permeability for pedestrians and cyclists.
- 8.4. Through direct communication channels from residents to the TPC, as well as personal site visits, any maintenance issues identified with constructed pedestrian / cyclist routes on site will be identified to the Developer or CCC (as applicable) to be rectified.

### ***Public Transport***

- 8.5. An up to date schedule of bus and rail services, within the surrounding area of the site, including route information and service frequencies is permanently available to the residents of the site (see **Marketing and Promotion**). The use of smartphone apps and mobile technology will be promoted so residents can access up to date bus timetables.
- 8.6. Residents are also made aware of the seasonal discounts of fares that are currently available for buses and train services through promotional links to relevant websites and can be found on the Smarter Travel website for Darwin Green.
- 8.7. Residents are made aware of both rail and bus timetables, routes and fares through Travel Information Packs in addition to the Darwin Green TP website.
- 8.8. Relevant events such as, 'Catch the Bus Week' will be promoted to residents (see **Marketing and Promotion**).
- 8.9. In order to promote early positive behaviour change, each dwelling is provided the opportunity to gain 4-weeks free bus travel on Stagecoach bus services or the approximate equivalent value as a voucher for an online activewear retailer (this voucher value will be reviewed upon each phase of Darwin Green). In order to claim their voucher, residents must contact the TPC and will be promoted through a "Travel Information Pack" (TIP).
- 8.10. A dedicated bus service will be provided through the site linking Darwin Green to the city centre. This service will ensure that no dwelling is more than a 400m distance from a bus stop. This is secured through a Section 106 requirement.
- 8.11. Through Section 106 requirements, improvements will be made to two bus stops along Huntingdon Road.

- 8.12. When the bus routes are diverted through the development, this will be promoted to residents through social media channels in addition to an on-site marketing event. In addition to this, bus ticket incentives will be promoted to residents again upon completion of bus route changes.
- 8.13. A bus gate will be installed within the development (secured by the Section 106). This will prevent the use of private motor vehicles using the development as a cut through from Huntingdon Road to Histon Road.

### ***Walking***

- 8.14. Pedestrian routes in the vicinity of the site are adequate, linking with local amenities within Cambridge. However, the TPC will liaise with the relevant authority to highlight any maintenance issues.
- 8.15. The residents are provided with information on pedestrian routes from the site to relevant local amenities such as the city centre, Science Park and other leisure facilities within the TIP and through the TP website.
- 8.16. Local walking groups will continually be promoted to residents of Darwin Green. Additionally, events such as, 'Walk to Work Week' will be promoted through regular marketing material (see **Marketing and Promotion**).
- 8.17. Route planning mobile apps and websites will be promoted through the TIPs as well as through the Darwin Green Travel Plan website.
- 8.18. The TPC will work with TPCs of local schools in the nearby vicinity with the aim of encouraging walking to and from Darwin Green where possible.
- 8.19. As an alternative to a one month public transport pass, residents can claim an active travel voucher (for the equivalent value of 4-weeks bus travel) to purchase either walking or cycling equipment (the value of the voucher will be reviewed upon each phase of Darwin Green). The voucher incentives are promoted through the TIP and will be funded by the developer.
- 8.20. As per Section 106 requirements, walking signage will be displayed within the Darwin Green development. This will highlight directions to key destinations. Further details are to be agreed between BDW and CCC.

### ***Cycling***

- 8.21. The TPC will liaise with the relevant authority to ensure that local cycle routes are properly maintained, should residents provide information on issues. The residents will be provided with information and advice concerning highway safety and appropriate cycle routes from the site to relevant regular destinations via Personal Travel Planning (see **Marketing and Promotion**).
- 8.22. As a Section 106 requirement, upgrades of the existing nearby cycle network are to be made, in particular along Histon Road, Brownlow Road, Blackhall Road, Hazelwood Close and Roseford Road. There will also be additional upgrades to the existing pelican crossing to create a toucan crossing to accommodate additional cycle movements, as of this TP update the toucan crossing has been provided.

- 8.23. Combined cycle and train journeys will be promoted to residents of Darwin Green. Information on rail operators policies regarding bicycles is available to residents through the Darwin Green TP website and TIPs.
- 8.24. The active travel voucher that is available to residents can be spent on cycling equipment or accessories (the value of the voucher will be reviewed upon each phase of Darwin Green). Alternatively, it can be used as a contribution towards to the cost of a new bicycle and will be promoted heavily through the TIP and funded by the developer.
- 8.25. A bicycle loan scheme is available through the TPC for residents of Darwin Green. These bicycles are available for residents to borrow free of charge to try cycling as an alternative to their regular mode of travel. The bicycle loan scheme is currently facilitated by an external company; Outspoken.
- 8.26. High visibility cycling clothing is available to residents. Items such as reflective bands and jackets are given away to residents through regular social media competitions coinciding with national cycling events such as Cycle to Work Day. Additionally, the active travel voucher available to residents can be redeemed against high visibility items.
- 8.27. A cycle buddy scheme is promoted to residents through social media posts and printed marketing material including newsletters. The cycle buddy scheme encourages those who are less confident in cycling to partner up with others who are more confident.
- 8.28. Bicycle servicing sessions are offered to residents and funded by the developer at the time of on-site sustainable travel events, the latest on-site event took place in July 2022 with further events taking place biennially. In addition to this, bicycle servicing is offered at appropriate points throughout the monitoring period to coincide with national sustainable travel events.
- 8.29. Cycle training sessions are available to residents of Darwin Green. This is provided through a qualified operator such as Outspoken Training and funded by the developer.
- 8.30. Local groups such as Cambridge Cycling Campaign are promoted to residents through regular marketing material.
- 8.31. Second hand bike retailers such as The Bike Man are promoted to residents through the TIP and additionally through the Darwin Green Travel Plan website.
- 8.32. Employee benefits such as cycle to work schemes are highlighted to residents.
- 8.33. A cycle route map is available to residents through the Darwin Green TP website. Additionally, locations of city centre cycle parking facilities will be shown in marketing material distributed.
- 8.34. For those residents that work on the Cambridge Science Park or nearby Addenbrooke's Hospital, Cambridge Electric Transport will be promoted to them. This service allows the hire of E-bikes for trips around the site. Bikes

need to be pre-booked online or via the app at <https://cambridgeelectrictransport.co.uk/>.

- 8.35. Secure cycle parking will be installed by the developer throughout the site for residents, this will comply with CCC parking standards. Additionally, visitor cycle parking will be provided as various locations including the community centre. This cycle parking will be monitored throughout the TP monitoring period on an informal basis. If capacity reaches 85% at peak times, further cycle storage will be considered.

#### ***Car Travel***

- 8.36. Car sharing represents a relatively convenient and alternative form of car travel and potential exists to reduce the total commuter mileage of the residents.
- 8.37. The TPC will establish from the multi-modal travel survey, the potential for car sharing to and from regular destinations and will arrange for individual residents to be made aware of that potential. For example, if it is found that many residents are travelling to places such as the employment areas such as the Science Park, the TPC will contact the relevant TPC of these locations in the hope of cross promotion of the benefits of car sharing journeys.
- 8.38. The Travel Plan Coordinator will promote the Cambridgeshire car share scheme (<https://liftshare.com/uk/community/camshare>), to provide opportunities to car share with residents from the surrounding areas. Residents will be made aware of the car share website and be encouraged to make use of the information it contains from the outset.
- 8.39. Furthermore, residents will be encouraged to use the Darwin Green social media group to liaise with each other and arrange any potential car sharing opportunities.
- 8.40. Currently, there are almost 400 car sharing options listed on the Lift Share website which residents of Darwin Green could utilise to places such as; Chelmsford, Bar Hill, Norwich, Royston or Peterborough.
- 8.41. Car sharing will be promoted to residents of Darwin Green and the wider area through Facebook advertising. Bi-annual Facebook campaigns will be published to highlight the cost savings involved with sharing journeys if when required by the TPC.
- 8.42. Residents are made aware of the car sharing scheme via social media, TIPS and the Darwin Green TP website. Residents who commute via single occupancy vehicles will be encouraged to sign up to CamShare.
- 8.43. Car clubs provide a suitable alternative to car ownership, particularly for second vehicle households. At the time of this update, two Car Club vehicles are located within Darwin Green via Enterprise.



### **Marketing and Promotion**

- 8.44. The TPC provides training to the sales staff of the Developer on the aims and objectives of the TP as well as the incentives available to residents. Posters have also been provided so that sales staff can visually show the sustainable travel options available to them. This is completed upon each site visit with the latest site visit taking place in May 2023.
- 8.45. It is considered that in order to best promote a change in sustainable travel habits of new residents to an area, it is key to provide information within the first few weeks of moving in. Therefore, each dwelling is provided with a TIP that will direct residents to the development Travel Plan website and social media for travel related information and contact details of the TPC within 2 weeks of moving in. A survey of current and intended travel habits will also be included within the TIPs to ascertain very early indications of travel behaviour change.
- 8.46. The TIP will be revised and updated upon each phase of the development ensuring all information is up to date and current. Additionally, residents can request more personalised travel advice by contacting the TPC.
- 8.47. A stakeholder group has been set up for the Darwin Green TP which will be managed by the TPC. The stakeholder group will provide feedback and assistance on TP measures. This group includes representatives from; BDW, CCC, local public transport operators and members of local cycling groups. Currently members of the stakeholder group include; Mr N from Greater Anglia, a representative from Cambridge Cycling Campaign and representatives from the developer.
- 8.48. A travel website has been created specifically for the development's residents via [www.DarwinGreenTP.uk.com](http://www.DarwinGreenTP.uk.com) this provides links to this TP and summary reports as well as a useful way to contact the TPC for general travel related queries or for Personal Travel Planning. It also provides information set out below and further links to other useful travel related websites:
- Information on what a TP is and the benefits of the scheme;
  - Real-time bus information (when the bus route is diverted)
  - Local area map indicating local amenities (within TIP);
  - Links to the social media pages and news articles;
  - Information on car sharing, eco-driving, travel information and community transport availability;
  - Personal Travel Plan requests;
  - Public transport information;
  - Cycle and pedestrian route maps (a Cambridge Cycle Map is provided in **Appendix B**);
  - Details of how to obtain the sustainable travel vouchers and any other measures including residents travel surveys;

- Marketing for the Cambridgeshire Lift Share website and rail discount card links; and
  - Contact details of the TPC for the residents to be able to discuss any travel related problem or to receive further information for their personalised trips.
- 8.49. The TPC will, through the use of social media and other marketing materials for the development, promote the use of sustainable travel and any nationally promoted travel days such as national bike week, etc.
- 8.50. Healthy living and active lifestyles will be promoted to residents by promoting leisure passes or gym trials for residents.
- 8.51. A residents group has been set up for Darwin Green. This residents group will consist of volunteers who have identified themselves in response to TP marketing whom wish to have an input into the TP and its measures. The residents group will regularly liaise with the TPC on any potential issues in the Darwin Green area. These residents will be incorporated into a mailing list. Currently one resident has expressed an interest in joining the residents group, however, it will be further promoted in upcoming marketing campaigns.
- 8.52. It is recommended that the TPC undertake promotional measures to increase awareness of the Travel Plan. Suggested measures are as follows:
- Annual newsletters to be distributed to all residents highlighting any relevant travel information or local events happening;
  - Additional marketing material will be produced and distributed by the Darwin Green sales team. This will be produced in the form of flyers which highlight the benefits of the development's TP to any potential purchasers;
  - Marketing material in the form of information posters are to be displayed in a noticeboard located at the community hub (Phase Two);
  - Postal/online surveys with prize incentives will take place annually as and when required;
  - Sustainable travel marketing events are to take place on-site. The first event was due to take place at approximately 100<sup>th</sup> dwelling occupation, however, Covid-19 and social distancing guidelines has delayed this. The first on-site event took place on 3<sup>rd</sup> July 2022.;
  - Sustainable travel marketing events will then take place biennially with the next event scheduled for 2024; and
  - General small social media promotional events to engage with residents and provide information directly on sustainable travel.

### ***Personal Travel Planning***

- 8.53. The TPC will provide Personalised Travel Planning (PTP) to residents who request it. They will be made aware of this scheme by information provided

on the website and via marketing media issued to them. They can also contact directly the TPC through details given in **Section 4** of this TP.

- 8.54. Residents will be given the opportunity to request a telephone conversation with the TPC to further discuss their PTP results and provide specific travel planning advice for their requirements.
- 8.55. In order to have the greatest impact on travel behaviour, Personal Travel Plans will be offered to any prospective purchasers or residents of Darwin Green. This promotion is undertaken through distribution of A5 promotional flyers.
- 8.56. The above list of measures is not exhaustive and should provide a basis of measures that can be implemented easily. The TPC will identify other measures throughout the life of the plan to aid in achieving the set targets and reducing single occupancy car travel.

## **9. MANAGEMENT AND MONITORING**

- 9.1. A programme of monitoring and review has been designed to generate information by which the success of the scheme can be evaluated. Monitoring and review will be the responsibility of the TPC.

### ***The Travel Plan Coordinator***

- 9.2. The TPC has been identified and appointed – with the contact details set out in **Section 4**. The TP will be managed until at least one year after complete occupation of the residential dwellings. Although Section 106 requirements states the TPC is to be funded until final occupation, to best monitor the TP it is suggest that this is extended to one year after full occupation. The TPC is funded by the Developer from appointment prior to first occupation and for the duration of the monitoring period.
- 9.3. The TPC takes responsibility for the development and management of the TP and ensures its delivery to its completion of the monitoring period. It is important that the TPC makes regular visits to the site and presents the ideals of the TP to the residents and oversees the monitoring and reporting of the TP to the Local Authority.
- 9.4. The TPC is able to provide PTP to residents of this development. This service is provided on demand and is available within 2-4 weeks of residents' request.
- 9.5. The TPC ensures that structures for the on-going management of the plan are set up and running effectively, and helps to promote individual measures such as bus tickets, car sharing, etc. This can be undertaken through social media / marketing material, PTP and / or via the development TP website.
- 9.6. The TPC has liaised with the public transport operators, highway authority and / or the Developer in order to report any inadequacies in maintenance to maximise the potential use of sustainable travel options. As of the 2023 site visit there were no issues to report.
- 9.7. The TPC will liaise with local schools in order to promote walking and cycling to school where possible. In addition to this, the TPC will liaise with other TPC's in the area where possible.
- 9.8. The TPC is responsible for setting up and the security of the residential travel database which includes the results of the multi-modal traffic surveys. In the interest of confidentiality, the TPC alone will hold the database and be responsible for the release of the results to the Local Authority and to the residents (data should be conveyed in an accessible but secure format).
- 9.9. The TP is reviewed at every completion of the annual multi modal travel survey, as part of an on-going monitoring process ending one year after full occupation of the development. The TPC will submit details of each review to CCC within two months of the completion of the surveys.

### ***Monitoring***

- 9.10. To ascertain whether the residents have already changed their mode of travel as a result of moving to this development from another location, a

short survey is provided within the TIP that the resident will need to complete to obtain the 4 one-week bus tickets or active travel voucher alternative.

- 9.11. This modal split of travel is then used to compare the effectiveness of the TP over the monitoring period. The data should also be used to identify what further measures, if any, are required to further promote the TP and its objectives.
- 9.12. The results of the survey are issued to CCC as part of the TP review identifying the progress against the original objectives and targets. If the set targets have not been reached the TPC will seek to address and improve use of any mode, which seems to be underrepresented and where greater utilisation could reasonably be achieved and report to CCC.
- 9.13. In addition to the multi-modal traffic surveys, the take-up of additional TP measures will be monitored to demonstrate the impact of the TP on the residential estate, and to understand which measures are successful. The measures to be monitored are:
- The take up of PTP and response to follow up surveys;
  - The level of redemption of the free bus travel;
  - The level of redemption of the active travel voucher.
  - The number of residents requesting free car club membership.
  - The number of residents undertaking cycle training.
  - The number of residents utilising the free bicycle hire.

#### ***Multi-Modal Travel Survey***

- 9.14. In order to identify the travel patterns of the residents of the development, a baseline multi-modal travel survey took place at just after 100<sup>th</sup> dwelling occupation. Manual surveys are repeated annually to analyse how the residents and visitors travel from and to the development and observe how effective the TP is in influencing modes of travel.
- 9.15. The annual multi-modal survey could be supplemented by postal/online surveys of residents as and when required. The postal/online surveys will provide a more direct method of questioning of travel habits and assist in providing measures that can assist in changing residents travel habits to more sustainable modes. A copy of example post/online survey questions can be found in **Appendix E**.
- 9.16. The multi-modal survey will be undertaken at a cost to the Developer and be at a similar time of the year to provide a comparative assessment. The survey will take place during British Summer Time months (April to October) due to the extended daylight hours and ensuring accuracy in the survey results. It will also be ensured prior to the survey being undertaken that the following circumstances will not affect the outcomes of the surveys:
- School / public holidays;
  - Highway maintenance;

- Closures on public transport services; and / or
- Any publicised strike action.

- 9.17. The methodology of undertaking the multi-modal survey will involve a manual count of all vehicle, pedestrian and cyclist movements in and out of Darwin Green. The determined mode split of travel and car trip rates will then be able to be used to compare the effectiveness of the TP over the monitoring period. The data also enables a way to identify any new travel plan measures that could be introduced, to assist in reducing single occupancy car travel.
- 9.18. Where possible and only if required, ATCs will be used to record vehicle movements in and out of Darwin Green.
- 9.19. The manual count survey will be taken over a 12-hour period (7am – 7pm) on either a Tuesday, Wednesday, or Thursday. As the development is still under construction, associated construction / contractor movements will be disregarded where possible.
- 9.20. All survey information shall be kept secure by the TPC in accordance with the ST Ltd Data Protection Policy. Hard copies of any surveys that have any personal information on shall be kept on file in a lockable cabinet for a period of no more than two years and shall be securely destroyed thereafter. Electronic copies of surveys that hold any personal information shall be saved securely on the local server and the file shall be password protected. Electronic copies shall not be kept longer than a period of two years and shall be securely deleted thereafter.

#### ***Options for future managing the Residential Travel Plan***

- 9.21. There is a choice of different structures available for the on-going management of the TP beyond the ten-year monitoring period, should demand warrant it.
- 9.22. The different options for management exist, are as follows:
- Management or consultant Companies;
  - Town Council;
  - Steering groups, created with partnership working between the Local Authority, Developer and local representatives; and
  - Resident Groups.
- 9.23. Whichever option is chosen then it will be notified to the Local Authority within the final TP review.

**10. BASELINE MONITORING AND TRAVEL PLAN UPDATE**

***Manual Monitoring***

10.1. A manual 12-hour survey of Darwin Green was undertaken on Wednesday 19th May 2021. Cameras were installed at all access points of the development and movements in and out were recorded including by which mode. On the day of monitoring, the highest temperature was 14°C with occasional showers. At the time of monitoring, 118 dwellings were occupied.

10.2. The initial targets set out in the Interim Travel Plan are as follows:

- Within three years of implementation of the full TP, decrease the single occupancy vehicle journeys by 2% when compared to the date shown in the 2012 Travel Plan (seen in **Table 10.1**).
- Within five years of implementation of the full TP, decrease the single occupancy vehicle journeys by 5% when compared to the date shown in the 2012 Travel Plan (seen in **Table 10.1**).
- Retain the car trip rates seen at year five of implementation of the full TP when compared to that identified in the 2012 Travel Plan (seen in **Table 10.1**).

**Table 10.1 – Modal Split 2012 Travel Plan compared to 2021 baseline monitoring**

<b>Mode of Transport</b>	<b>Percentage 2012 Travel Plan</b>	<b>Percentage 2021 Baseline Monitoring</b>
Train	1%	N/A
Bus	8%	N/A
Taxi/Minicab	1%	0%
Driving a car or van	39%	53.95%
Passenger in car or van	13%	8.87%
Motorcycle, scooter or moped	1%	2.92%
Bicycle	22%	14.82%
On foot	15%	19.44%
<i>Total commuting</i>	<i>100%</i>	<i>100%</i>

10.3. The current modal split from the 2021 survey is different to that identified in the 2012 Travel Plan. There is a bigger percentage of residents choosing to travel by single occupancy vehicle journeys, however, this could be due to



social distancing / use of public transport guidelines at the time of monitoring. Residents travelling by foot is higher than expected, however, it is possible some of these are walking to nearby bus stops along Huntingdon Road to continue their journey.

- 10.4. During manual surveys, construction traffic has been excluded where possible.
- 10.5. To supplement the manual monitoring of Darwin Green, a one-week ATC was installed at the vehicular entrance along Lawrence Weaver Road. The trip rates can be seen in **Table 10.3**. Trip rates are typically higher with ATC's during the construction phase as not all construction related vehicles can be discounted from the surveys.

**Table 10.3 – Trip Rates from 2021 Monitoring**

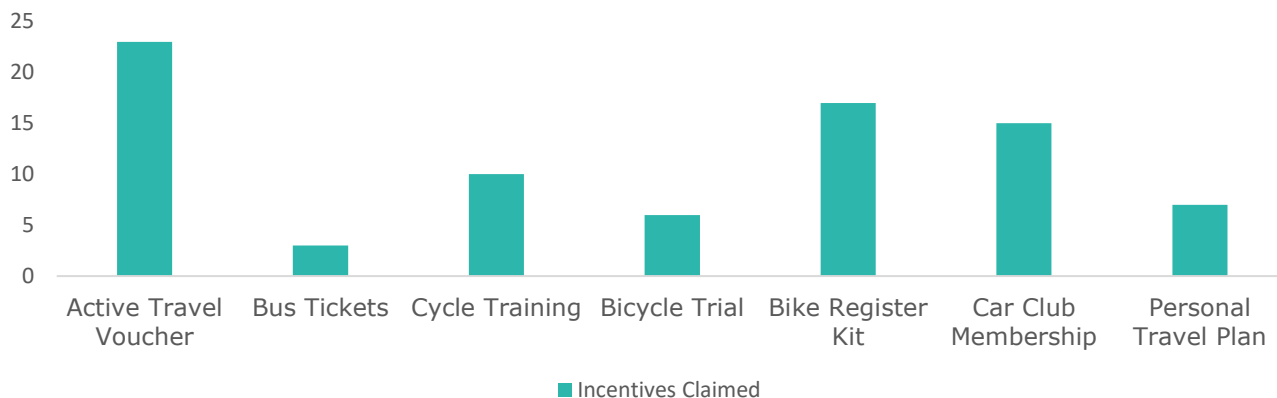
	<b>ATC - Trip Rate (average over 3- weekdays)</b>	<b>Manual Trip Rates observed on 19<sup>th</sup> May 2021</b>
<b>AM Two-way</b>	0.530	0.525
<b>PM Two-way</b>	0.440	0.432
<b>12-hour Two-way</b>	4.200	4.381

***Postal/Online Questionnaire***

- 10.6. To support this manual on-site monitoring, a postal/online survey of households was undertaken during June 2021. Residents were asked about their current travel habits and the impact Covid-19 had on these. A prize draw was offered to encourage participation. A 14% response rate was obtained through the summer 2021 travel survey. Usual methodology would allow for door-knocking to take place to encourage more residents to complete the survey, however, due to social-distancing rules, this was not possible during 2021. It is anticipated that this will be able to happen in the next round of postal/online surveys required (Summer 2022).
- 10.7. Overall, it was identified that most respondents travel into Cambridge city centre most frequently, additionally, these residents travel by active travel modes (walking and cycling). Those residents that travel by single occupancy vehicle tend to travel to locations such as Cambridge Business Park or Cambourne. Other residents suggested they travelled by car due to other circumstances such as childcare purposes or due to caring duties.
- 10.8. Residents identified positive travel changes due to the Covid-19 pandemic. Many respondents have suggested that they now walk more for leisure purposes due to the pandemic. Additionally, it is expected that working from home will become a more frequent occurrence which will have a positive impact on travel habits.
- 10.9. During September 2020 a newsletter was sent to all occupied households within Darwin Green. Information within the newsletter included working from home tips and advice, a children's art competition, a reminder of the active travel vouchers available and offering residents the opportunity to claim Personal Travel Plans.

10.10. 22% of residents have so far claimed their initial incentive (bus tickets or active travel voucher to be redeemed online). Details of incentives claimed can be found in the chart below.

### Breakdown of incentives claimed by residents



**Chart 10.1 – Incentives claimed by residents of Darwin Green 2021**

10.11. Regular social media posts have been published including information on electric vehicles, public transport, and government guidance on travel during the pandemic. In 2021, 30 residents followed the Darwin Green Travel Plan Facebook page.

#### **2021-2022 Action Plan**

10.12. Although Covid-19 restrictions have eased within the UK, it is likely that travel habits are not yet as expected. We would expect to see different monitoring results in the 2022 surveys. Additionally, as Darwin Green develops, more facilities will be available on-site, reducing the need for travel. It is anticipated that this will have a positive effect on travel behaviour.

Measure	Action	Timescales
Active travel voucher/Bus tickets	Initial travel incentives will be continually promoted to new residents, primarily through the TIP.	As new residents occupy.
On-site event	An on-site event is due to take place. This will include bicycle servicing for residents, Personal Travel Plans and free promotional material.	Spring 2022 (this is dependent on any Covid-19 measures in place, in the event of strict government rules, this will be reviewed).
Multi-modal travel survey	A 12-hour manual count of all movements in and out of the development. Supplemented by a postal/online travel	Undertaken early summer 2022.

	survey of resident's travel habits.	
Travel Plan Newsletters	An annual update to all households on relevant travel information and news. Information will also include reminders of the travel incentives available.	Newsletters to be sent annually. A newsletter to be distributed Autumn 2022.
Darwin Green travel plan website & social media	The Darwin Green travel plan website and social media channels (Facebook and Twitter) will be regularly reviewed and updated with useful information.	Social media channels are updated at least weekly with relevant news and events. Darwin Green travel plan website to be updated as required.
Car Club promotion	It is expected that on-site Car Club vehicles will be available before the end of 2021. A promotional campaign will take place to highlight the service to all residents.	As the first Car Club vehicle is located within the Darwin Green development.

## 11. FIRST ANNIVERSARY MONITORING

### *Manual Monitoring*

- 11.1. A manual 12-hour survey of Darwin Green took place on Wednesday 27th April 2022. Cameras were installed at all access points of the development and movements in and out were recorded including by which mode. On the day of monitoring, the weather was dry with no rain. At the time of monitoring, 170 dwellings were occupied. Data can be found in **Appendix G**.
- 11.2. A 7-day automatic traffic count (ATC) system was also used to calculate vehicular trip rates of the site. Placed on Lawrence Weaver Road the ATC commenced on Thursday the 21<sup>st</sup> of April 2022 and recorded a total of 5,736 vehicles.
- 11.3. The initial targets set out in the Interim Travel Plan are as follows:
- Within three years of implementation of the full TP, decrease the single occupancy vehicle journeys by 2% when compared to the data shown in the 2012 Travel Plan (seen in **Table 11.1**).
  - Within five years of implementation of the full TP, decrease the single occupancy vehicle journeys by 5% when compared to the data shown in the 2012 Travel Plan (seen in **Table 11.1**).
  - Retain the car trip rates seen at year five of implementation of the full TP when compared to that identified in the 2012 Travel Plan (seen in **Table 11.1**).

**Table 11.1 – Modal Split 2012 Travel Plan compared to 2022 first anniversary monitoring**

<b>Mode of Transport</b>	<b>Percentage 2012 Travel Plan</b>	<b>Percentage 2021 Baseline Monitoring</b>	<b>Percentage 2022 First Year Monitoring</b>
Train	1%	N/A	N/A
Bus	8%	N/A	N/A
Taxi/Minicab	1%	0%	6%
LGV	N/A	N/A	4%
Driving a car or van	39%	53.95%	42%
Passenger in car or van	13%	8.87%	11%
Motorcycle, scooter or moped	1%	2.92%	1%

Bicycle	22%	14.82%	21%
On foot	15%	19.44%	15%
<i>Total commuting</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

- 11.4. The current modal split from the 2022 survey has improved compared to that identified in the 2021 survey. There is a reduced percentage of residents choosing to travel by single occupancy vehicle journeys, in correlation to this taxi use and car sharing has increased. This could suggest residents are giving up car ownership or limiting their use due to the rise in cost of living.
- 11.5. The percentage of residents travelling by foot has reduced from the previous year, however, it aligns with 2011 Census data. It is possible some of these residents are walking to nearby bus stops along Huntingdon Road to continue their journey. This may also correlate with the rise in taxi and car sharing use in the 2022 monitoring; those who would normally take taxis could have avoided them during baseline monitoring, choosing to walk as people were more cautious of Covid-19.
- 11.6. The modal split in favour of cyclists has increased compared to baseline monitoring in 2021, which is positive. It is expected that this modal split could increase when issues with car parking throughout the development are rectified.
- 11.7. Overall, there is a positive trend in the modal split of transport mode when compared to baseline monitoring data. It is expected this will improve further once the on-site non-residential uses are opened up like the supermarket and school.
- 11.8. During manual surveys, construction traffic has been excluded where possible.
- 11.9. To supplement the manual monitoring of Darwin Green, a one-week ATC was installed at the vehicular entrance along Lawrence Weaver Road. The trip rates can be seen in **Table 11.2**.
- 11.10. Trip rates in the table below are very positive; they demonstrate a considerable reduction in single occupancy car use in AM, PM and over a 12-hour average compared to the previous year. Results from the questionnaire sent to the residents show that most residents frequently travel into the city centre, and to do so they use active modes of transport. A peak in last year's trip rates could be due to residents using single occupancy car use to feel safer and reduce risk of catching Covid-19.

**Table 11.2 – Trip Rates from 2022 Monitoring**

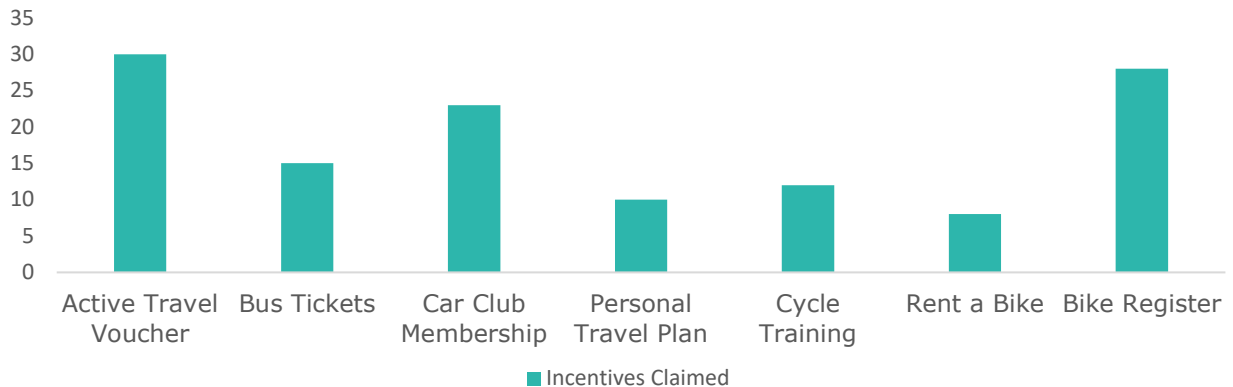
	<b>Trip Rate (ATC average over 3-weekdays 2021)</b>	<b>Trip Rate (ATC Average over 5-weekdays 2022)</b>	<b>Manual Trip Rates observed on 27th April 2022</b>
<b>AM Two-way</b>	0.530	0.473	0.524
<b>PM Two-way</b>	0.440	0.388	0.359
<b>12-hour Two-way</b>	4.200	3.848	3.571

**Postal/Online Questionnaire**

- 11.11. To support this manual on-site monitoring, an online survey of households was undertaken in spring 2022. Residents were asked about their current travel habits and what can impact these decisions. A prize draw was offered to encourage participation, a 15% response rate was obtained which did not achieve the initial target set out in **Paragraph 7.8**.
- 11.12. Overall, it was identified that most respondents travel into Cambridge city centre most frequently, additionally, these residents travel by active travel modes (walking and cycling). Those residents that travel by single occupancy vehicle tend to travel to locations such as Cambridge Business Park or Cambourne. Other residents suggested they travelled by car due to other circumstances such as childcare purposes or due to other personal reasons.
- 11.13. Contact through the Darwin Green social media page has made the TPC aware of an unclear residential parking area. This has led to some residents parking in cycle lanes, which has deterred other residents from using their bicycle. This information was passed back to the developer and further updates will be provided accordingly.
- 11.14. Most residents use active modes of transport on Darwin Green, but to travel more sustainably, many respondents indicate that they would like better public transport options. This would include a cheaper and more frequent bus service. The bus services which run along Huntingdon Road currently stops every half hour outside of the site. Responses suggest that this could be a determining factor in minimising car use.
- 11.15. During February 2022 a newsletter was sent to all occupied households within Darwin Green. Information within the newsletter included chances to win prizes, sustainable travel tips, a reminder of the active travel vouchers available and offering residents the opportunity to claim Personal Travel Plans.
- 11.16. 29% of residents have so far claimed their initial incentive which exceeds the target of 15% (bus tickets or active travel voucher to be redeemed online). Details of incentives claimed can be found in the chart below.
- 11.17. Regular social media posts have been published including information on electric vehicles, and public transport. As of 2022, 30 residents follow the Darwin Green Travel Plan Facebook page.



## Breakdown of incentives claimed by residents



**Chart 11.1 – Incentives claimed by residents of Darwin Green 2022**

11.18. An on-site Travel Plan event took place on 3<sup>rd</sup> July 2022. During this event, residents were invited to meet Smarter Travel to discuss sustainable travel to and from Darwin Green. Additionally, bicycle service vouchers were handed out to residents and sustainable travel items such as bicycle lights, reflective bands, umbrellas, and children’s reflective items.

### **2022-2023 Action Plan**

<b>Measure</b>	<b>Action</b>	<b>Timescales</b>
Active travel voucher/Bus tickets	Initial travel incentives will be continually promoted to new residents, primarily through the TIP.	As new residents occupy.
Multi-modal travel survey	A 12-hour manual count of all movements in and out of the development. Supplemented by a postal/online travel survey of resident’s travel habits.	Undertaken early summer 2023.
Travel Plan Newsletters	An annual update to all households on relevant travel information and news. Information will also include reminders of the travel incentives available.	Newsletters to be sent annually. A newsletter to be distributed Autumn 2023.
Darwin Green travel plan website & social media	The Darwin Green travel plan website and social media channels (Facebook and Twitter) will be regularly reviewed	Social media channels are updated at least weekly with relevant news and events. Darwin Green travel plan website

	and updated with useful information.	to be updated as required.
Car Club promotion	2 Car Club vehicles are currently available onsite. A promotional campaign will take place to highlight the service to all residents.	TBC

**12. SECOND YEAR ANNIVERSARY MONITORING**

- 12.1. A manual 12 hour survey count was undertaken on Tuesday the 6<sup>th</sup> of June 2023, and the weather was cloudy and dry. Cameras were installed in access points on Lawrence Weaver Road and the footpath that leads to Randal Way in the development and all movements going in and out of the site was recorded. At the time of monitoring, 218 dwellings were occupied. Data can be found in **Appendix H**.
- 12.2. A 7-day automatic traffic count (ATC) system was also used to calculate vehicular trip rates of the site. Placed on Lawrence Weaver Road the ATC commenced on Tuesday the 6<sup>th</sup> of June 2023 to Monday 12<sup>th</sup> of June 2023 and recorded a total of 7,797 vehicles.
- 12.3. The initial targets set out in the Interim Travel Plan are as follows:
- Within three years of implementation of the full TP, decrease the single occupancy vehicle journeys by 2% when compared to the data shown in the 2012 Travel Plan (seen in **Table 11.1**).
  - Within five years of implementation of the full TP, decrease the single occupancy vehicle journeys by 5% when compared to the data shown in the 2012 Travel Plan (seen in **Table 11.1**).
  - Retain the car trip rates seen at year five of implementation of the full TP when compared to that identified in the 2012 Travel Plan (seen in **Table 11.1**).

**Table 12.1 – Vehicle trip rates 2022 first anniversary compared to 2023 second anniversary monitoring**

<b>Mode of Transport</b>	<b>Weekday 12 hour vehicle trip rate 2022</b>	<b>Weekday 12 hour vehicle trip rate 2023</b>
Train	N/A	N/A
Bus	N/A	N/A
Taxi/Minicab	0.418	0
LGV	0.241	0.482
Driving a car or van	2.835	3.271
Passenger in car or van	0.765	N/A
Motorcycle, scooter or moped	0.053	0.092
Bicycle	1.394	1.183
On foot	1.029	1.550

- 12.4. Due to the count method at this year’s monitoring, the recordings could not determine the passengers in vehicles. Therefore, we have not compared this modal split for this year’s monitoring with review to include passenger numbers to be included in next year’s monitoring.

- 12.5. The current vehicle trip rate from the 2023 survey has increased compared to that identified in the 2022 survey. There is an increased amount of residents choosing to travel by single occupancy vehicle journeys.
- 12.6. The trip rate of residents travelling by foot has also increased from the previous year. However, it is possible some of these residents are walking to nearby bus stops along Huntingdon Road to continue their journey.
- 12.7. The trip rate for cyclists has decreased compared to the first year monitoring in 2022. It is expected and possible that this trip rate could increase when issues with car parking throughout the development is rectified.
- 12.8. During manual surveys, construction traffic has been excluded where possible.
- 12.9. To supplement the manual monitoring of Darwin Green, a one-week ATC was installed at the vehicular entrance along Lawrence Weaver Road. The trip rates can be seen in **Table 12.2**.
- 12.10. Trip rates in the table below; they have increased in single occupancy car use in AM, PM and over a 12-hour average compared to the year previous.

**Table 12.2 – Trip Rates from 2023 Monitoring**

	<b>Trip Rate (ATC average over 3-weekdays 2021)</b>	<b>Trip Rate (ATC Average over 5-weekdays 2022)</b>	<b>Manual Trip Rates observed on 27th April 2022</b>	<b>Trip Rate (ATC Average over 5 weekdays 2023)</b>	<b>Manual Trip Rates observed on 6<sup>th</sup> June 2023</b>
<b>AM Two-way</b>	0.530	0.473	0.524	0.610	0.541
<b>PM Two-way</b>	0.440	0.388	0.359	0.500	0.459
<b>12-hour Two-way</b>	4.200	3.848	3.571	4.480	3.894

***Postal/Online Questionnaire***

- 12.11. To support this manual on-site monitoring, an online survey of households was undertaken in summer 2023. Residents were asked about their current travel habits and what can impact these decisions. A prize draw was offered to encourage participation, a 15% response rate was obtained which does not achieve the target set out in **Paragraph 7.8**.
- 12.12. About 26.7% of the respondents have requested for a Personal Travel Plan, which the TPC has already issued as of July 2023, which does not achieve the target set out in **Paragraph 7.8**.

- 12.13. 66.7% of the respondents are not aware of the Darwin Green Travel Plan and have not used the Travel Plan services. 26.7% of the respondents said they are aware of the Darwin Green Travel Plan yet have not claimed the Travel Plan services. The TPC will review this and will continue promoting the Darwin Green Travel Plan via social media, websites, and newsletters to help and encourage residents to travel more sustainably.
- 12.14. Due to not meeting the “aim-type” targets in 2021 and 2022, a review of the targets has been made from 2022 which represent a more realistic ambition for the development.
- 12.15. From the survey, 66.7% of the respondents mentioned that their most used travel mode is driving in a car alone. 53.3% of the respondents claimed that travelling by bike or E-bike was their most used travel mode, 40% of the respondents mentioned walking is their most used transport mode and 33.3% with bus services as their most used mode.
- 12.16. The main reasons for travelling a certain way was mainly due to convenience (66.7%), due to job requirements (46.7%), childcare reasons (26.7%) and no other suitable alternatives (20%).
- 12.17. When asked about whether they have considered car sharing their journeys, 40% of the respondents said yes while the remaining 60% of the respondents responding no. According to this collected data, the TPC will review this and continue to promote the benefits of car sharing.
- 12.18. In addition, 53% of the residents mentioned that cheaper public transport options would help encourage them to travel more sustainably, 40% said more reliable and frequent public transport options and later bus/ train services would encourage them to travel less by car.
- 12.19. Public transport discounts was also amongst one of the factors that could encourage residents to travel less by car. Residents of Darwin Green are currently entitled to either a 4 week free bus travel with Stagecoach buses within the Cambridge area or an alternative cycle voucher. The TPC will work to promote the existing offer to residents who have yet to claim their voucher to help encourage them to travel more sustainably.

**2023-2024 Action Plan**

<b>Measure</b>	<b>Action</b>	<b>Timescales</b>
Active travel voucher/Bus tickets	Initial travel incentives will be continually promoted to new residents, primarily through the TIP.	As new residents occupy.
Multi-modal travel survey	A 12-hour manual count of all movements in and out of the development. Supplemented by a postal/online travel	Undertaken early summer 2024.

	survey of resident's travel habits.	
Travel Plan Newsletters	An annual update to all households on relevant travel information and news. Information will also include reminders of the travel incentives available.	Newsletters to be sent annually.
Darwin Green travel plan website & social media	The Darwin Green travel plan website and social media channels (Facebook and Twitter) will be regularly reviewed and updated with useful information.	Social media channels are updated at least weekly with relevant news and events. Darwin Green travel plan website to be updated as required.
Car Club promotion	2 Car Club vehicles are currently available onsite. A promotional campaign will take place to highlight the service to all residents.	TBC





## Appendix A

















