Darwin Green 2/3

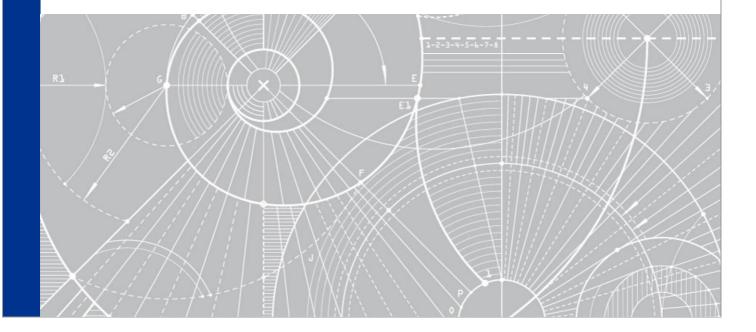
BARRATT EASTERN COUNTIES AND THE NORTH WEST CAMBRIDGE CONSORTIUM OF LANDOWNERS

Transport Statement

V.1 | FINAL

Client Reference

September 2014







Project Name

Project no:	KU028800
Document title:	Transport Statement
Document no:	V.1
Revision:	E
Date:	04 September 2014
Client name:	Barratt Eastern Counties and the North West Cambridge Consortium of Landowners
Project manager:	Mark Fitch
Author:	Lorna Parsons
File name:	I:\VNIF\Projects\VN50159\Deliverables\Reports\South Cambs Allocation Sept 2012\2014- 09-04 NIAB2-3 Transport Statement_Rev F.docx
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Document history and status

Revision	Date	Description	Ву	Review	Approved
F	14-09-04	Final	Lorna Parsons	Mark Fitch	Adrian Cole



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1. Introduction

1.1 Background

- 1.1.1 This document, prepared by Jacobs on behalf of Barratt Eastern Counties and the North West Cambridge Consortium of Landowners (Barratts), is a Transport Statement relating to the proposed residential development on land between Huntingdon Road and Histon Road. This document provides an update of the transport position to advise the South Cambridgeshire Local Plan Examination process.
- 1.1.2 Following detailed planning approval, 187 dwellings have been constructed on Huntingdon Road. A signalised vehicular access junction has also been completed.
- 1.1.3 In July 2010, Cambridge City Council resolved to grant permission for the Darwin Green1 development for 1,593 dwellings, subject to signing of a S106 agreement. The conditions, which place a strong emphasis on sustainability, were previously submitted as part of this application and proposed a number of measures to encourage travel by sustainable modes. A full travel plan has now been submitted to confirm these measures, outline the implementation strategy, set mode share targets for the development and describe the monitoring strategy for measuring the success of the travel plan.
- 1.1.4 This Transport Statement (TS) considers an extension to this development on land within South Cambridgeshire, for up to 1100 dwellings and a Secondary School, known as Darwin Green 2. This site, to the north of Darwin Green1 was allocated for residential use in the South Cambridgeshire LDF in 2009. In addition, this TS considers development of 100 dwellings on land known as Darwin Green 3, to the north of Darwin Green 2. There will also be a 2FE Primary School and a small local centre with a community / sports hall and a sports pavilion (for the facilities in the Country Park). Therefore, this TS considers a total development of 1,200 dwellings, a Secondary School and a Primary School.
- 1.1.5 A Statement of Common Ground was agreed in 2009 for Darwin Green 2 with the Highways Agency (HA) and Cambridgeshire County Council (CCoC) on the basis of providing a sustainable urban extension and implementing an Area Wide Travel Plan (AWTP) for existing residents near the site in addition to the highways works required for Darwin Green 1. At this time the A14 Ellington to Fen Ditton improvement scheme was funded by Government and expected to come forward. However, the scheme was abandoned by the Government in the October 2010 Spending Review.
- 1.1.6 However a Targeted Improvement Programme (TIP) and Pinch Point Programme (PPP) was agreed and in currently under construction. This will provide an additional lane in both eastbound and westbound directions of the A14 between Junctions 31 and 32 are being added. The existing westbound slip roads at the Girton Interchange, junction 31 of the A14, are also being improved, in order to increase capacity. The key features of this scheme include:
 - Constructing an additional lane on the eastbound and westbound carriageways between junctions 31 and 32.
 - Improving the Junction 31 westbound slip roads to both the M11 southbound and the A14 westbound.
 - Providing retaining structures for the carriageway to allow the existing road to be widened.



- Extending the existing street lighting from the Girton Road Bridge to junction 32.
- Providing six new sign gantries.
- 1.1.7 These works commenced on the 14 April and will completed by December 2014. Consequently these works would be in place before any development on Darwin Green 2/3 is completed. The estimated total scheme cost is £16.75 million.
- 1.1.8 In addition, in July 2012 the Government announced an A14 Cambridge to Huntingdon improvement scheme would enter the Road Programme as a tolled scheme. In June 2013 the Government then announced a fast track delivery programme for this scheme and scheme options consultation commenced in September 2013. However, in December 2013 the Government decided to remove tolling from the proposal.
- 1.1.9 The Government has now made a provision for £1.5billion of capital investment for the A14 Cambridge to Huntingdon Improvement Scheme. The proposals will be funded through a combination of contributions from Central Government, local authority and Local Enterprise Partnership.
- 1.1.10 The Highways Agency proposals include:
 - Widening a section of the A1 trunk road between Brampton and Alconbury;
 - Removing the road viaduct over the railway at Huntingdon;
 - A new bypass to the south of Huntingdon;
 - Detrunking the A14 between Ellington and Swavesey and Girton;
 - A new local access road;
 - Improvements to the Cambridge Northern Bypass; and
 - Junction improvements.
- 1.1.11 In light of the Government's decision to remove tolling, the Highways Agency (HA) undertook further assessment work to assess the schemes performance and feasibility. This work showed that, un-tolled, the proposed scheme would address the problems of traffic congestion extremely effectively on this section of the A14, offering adequate capacity and a high level of resilience well past the design year 2035. The Net Present Value (NPV) of the proposed scheme improves by over two-thirds to £1.32bn compared with the equivalent tolled solution and it has a benefit-to-cost ratio (BCR) of 2.3 which represents high value for money. It is noted that the HA conclude that this would increase if future phases of house-building to the west of Cambridge should gain planning permission.
- 1.1.12 If the development consent for the above scheme is granted, (Development Consent Order Application timetabled to be submitted in 2014), construction of the main works would be expected to commence in late 2016 and continue for a period of approximately 3.5 years to 2019/20 when the road will be open to traffic. Additional works would be carried out to downgrade the existing A14 trunk road to the south west of Huntingdon once the main construction was complete and these would be expected to take a further 12 to 18 months.
- 1.1.13 The transport strategy set out in this TS does not rely on completion of the A14 Cambridge to Huntingdon Improvement scheme. The A14 Junction 31 to 32 Eastbound and Westbound



Improvements (the "Pinchpoint" scheme) provides the improvements that are necessary for development of Darwin Green 2/3 and will be in place well in advance of any completions on Darwin Green 2/3. In addition, area wide travel planning measures will be in place for Darwin Green 1, extended to Darwin Green 2/3, which will minimise new car trips.

1.1.14 This TS describes the transport strategy for Darwin Green 2/3, how the site adheres to local policy aims and takes advantage of the existing opportunities in the Cambridge area, particularly the procycling culture.

1.2 Reference Material

- 1.2.1 This Transport Statement has been prepared with reference to the following information:
 - The Revised Transport Assessment (RTA) submitted in January 2009 for the allocated site in Cambridge City;
 - Transport Statement of Common Ground for South Cambridgeshire LDF May 2009
 - NIAB/Darwin Green1 Residential and Area-Wide Travel Plan January 2012
- 1.2.2 This Transport Statement has been developed to adhere to national and local policy, including:
 - National Planning Policy Framework (NPPF)
 - South Cambridgeshire Local Development Framework
 - Cambridgeshire Local Transport Plan 3 (2011-2016)
 - Cambridge City Council Local Plan (2006)



2. Site Description and Existing Conditions

2.1 Site Location

- 2.1.1 The Darwin Green 2 and Darwin Green 3 sites are located some 2.5 km north-west of Cambridge City Centre and encompasses approximately 30 hectares of principally agricultural land to the north west of the Cambridge City boundary. The Site lies wholly within the jurisdiction of South Cambridgeshire District Council, although access from Huntingdon Road will require land within the Cambridge City boundary.
- 2.1.2 The Site forms the northern part of a wedge of land known as the 'NIAB Triangle' situated between the A1307 Huntingdon Road, B1049 Histon Road and the A14 Cambridge Northern Bypass. The site lies to the north west of an existing allocation for a residential-led urban extension between Huntingdon Road and Histon Road, Cambridge (hereafter referred to as the 'Darwin Green Development') which is the subject of an outline planning application (07/0003/OUT) currently with Cambridge City Council along with a full planning application for associated highway and drainage infrastructure (S/0001/07/F) currently with South Cambridgeshire District Council. In July 2010 the applications were the subject of a Joint Development Control Committee Resolution to grant planning permission subject to the resolution of a S106 Legal Agreement.
- 2.1.3 The south western boundary of the site is formed by the north western boundary of the Darwin Green1 site with the northern boundary of the site defined by the A14 and the Site's western boundary formed by the landscape buffer known as the 'Girton Gap' which separates the Cambridge built-up area from the village of Girton to the west.

2.2 Access

- 2.2.1 The site has a frontage onto the Histon Road public highway. This frontage provides a vehicular access for the site. A further vehicular access is achievable onto Huntingdon Road, utilising the completed new access to the Darwin Green1 proposals, directly abutting the site.
- 2.2.2 In terms of the Histon Road access, the Cambridge City allocation requires a means of access onto Histon Road and agreement in principle has been secured from the local authorities that such access is best achieved through the South Cambridgeshire land in this location.



3. Transport Strategy for Land in the City and in South Cambridgeshire

3.1.1 As the planning application site in the City and the proposed site in South Cambridgeshire adjoin, a Transport Strategy that covers both sites has been proposed by the applicant. The Transport Strategy would therefore accommodate:

The planning application on land within Cambridge City for:

- 1,780 dwellings;
- a Primary School; and
- Associated community facilities including shops and sports fields.

The development on land within South Cambridgeshire for:

- up to 1,200 dwellings (1100 on Darwin Green 2 and 100 on Darwin Green 3); and
- a Secondary School on Darwin Green 2.
- 3.1.2 Therefore, the combined development could provide a total of circa. 3,000 dwellings, a Primary School, a Secondary School and local community facilities. For clarity, the Transport Strategy for the planning application site in the City will be referred to as the **Planning Application Transport Strategy (PATS)**, and the Transport Strategy for both sites will be referred to as the **Combined Transport Strategy** (**CTS**). The CTS was consulted on in January 2008 and again in January 2009 with the HA and CCoC.
- 3.1.3 It should be noted that Cambridgeshire County Council consider that, on the basis of the evidence provided only 1,000 dwellings could be built on land in South Cambridgeshire. The HA accept that 1,200 dwellings could be accommodated with A14 improvement works in the local area (this is discussed in more detail in the next section). These works are coming forward as part of the Highway's Agency's Pinch Point scheme discussed in Section 1.
- 3.1.4 Despite the fact that A14 improvements over a wider area, including an off line section of new highway, have Government capital investment and it timetabled to be open to traffic in 2019/20, this development does not rely on these wider works coming forward.
- 3.1.5 The CTS aims to make living without owning a car a realistic choice, through provision of:
 - A new bus link to the City, which will increase the number of bus services along Huntingdon Road;
 - Measures to promote cycling and walking including highways improvements;
 - Good Public Transport information and local area information;
 - Key local facilities to minimise the need to travel, such as schools, shops and health care facilities;
 - Fiscal incentives and effective marketing for up to 5 years;
 - A Car Club available for residents of the development and existing residents living in the northwest of Cambridge.



- 3.1.6 In addition, both the PATS and the CTS aim to reduce the use of the private car in the existing residential areas of north and north west Cambridge. Surveys reveal that car trips into Cambridge have not increased in recent years, but a reduction in car trips would be beneficial for all persons travelling in this area by any mode.
- 3.1.7 This reduced car use would be achieved through an Area Wide Travel Plan (AWTP). The methodology for analysing the impacts of this AWTP has been agreed and, following discussions, an AWTP for NIAB/Darwin Green1 has been issued to Cambridgeshire County Council. This AWTP would be expanded to the proposed developments to increase the beneficial effect of the package of measures. The submitted AWTP is provided as Appendix A to this note.
- 3.1.8 Nonetheless, highways works to mitigate the impact of any additional car trips are required. Mitigation works are already agreed in support of the 1,780 dwelling planning application site within Cambridge City. The need for works north of the A14, to the junction of Bridge Road and Cambridge Road, were shown to be marginal in the modelling undertaken in 2010 for Darwin Green 1 and hence were agreed to be pushed back until the 1050th dwellings was completed. Surveys during the 3 to 4 years it would take to reach this number of completions would reveal whether these works were actually required at all. The addition of land in South Cambridgeshire does increase the benefit of these works. This is discussed in more detail later in this report.
- 3.1.9 The PATS is secured through the signed Section 106 agreement and also secures a number of measures in the CTS.

3.2 The Measures to Provide Travel Choice

Public Transport

- 3.2.1 Public Transport in the northwest of Cambridge would be improved as a result of the CTS. The services that would be available are set out below, which include a dedicated new bus route in the PATS which could be extended and enhanced to serve the land in South Cambridgeshire. The principles of the route and frequency of the new bus service for the City development, known as CITI 8, have been agreed with CCoC, Cambridge City Council, and Stagecoach.
- 3.2.2 For journeys towards the City centre and the train station the following services will be available with the CTS:
 - The extended PATS bus link, with an initial frequency of 3 buses an hour, will serve the site with bus stops within 400 metres (5 min walk) of every dwelling. This route could increase its frequency as demand increases.
 - Bus services on Histon Road, including the high frequency CITI 7, provide additional services to the City centre and beyond to the train station and Addenbrooke's Hospital. Bus stops on Histon Road are within 800m of much of the land in South Cambridgeshire.
- 3.2.3 For journeys to other key destinations:
 - Bus routes CITI 5/6 run at a combined frequency of 6 buses an hour in peak times, with bus stops on Huntingdon Road within 10 min walk (800m) of the edge of the land in South Cambridgeshire. The CITI 5/6 provide frequent direct links to Girton, Oakington and Bar Hill;



- The Cambridgeshire Guided Busway (CGB) is now operating. The CGB will provide for trips by
 residents in some parts of Darwin Green2 and Darwin Green3 to the Science Park, and towards St.
 Ives and Huntingdon. However the dedicated bus service in the PATS, proposed to be extended to
 serve the site with the CTS, will provide a better link to the City than the CGB because of its
 proximity to residents of this development and its more direct routing. The nearest CGB stop will be
 880m (just over 10 min walk) to the centre of the land in South Cambridgeshire, and 1300m to the
 centre of the application site in the City;
- In the future there is potential for an additional orbital bus route through the site, from the Madingley Road Park & Ride site and the proposed University development through to the Science Park and proposed Chesterton Railway Station. This route is included in the Northwest Cambridge Transport Strategy and Cambridge University's planning application for North West Cambridge.
- 3.2.4 In addition, it has been agreed in the PATS that 2 bus stops on Huntingdon Road will be improved, along with 2 bus stops on Histon Road. The principle of bus priority measures within the City site has also been agreed using bus gates.

Pedestrian and Cycle Connectivity

- 3.2.5 In the PATS and the CTS, extensive pedestrian and cycle connections will provide for journeys to all destinations. This includes the agreed off-site works in the PATS that ensures that the city development is well connected to the existing pedestrian and cycle network. Signposted low vehicle traffic routes will be provided to all key destinations.
- 3.2.6 In summary, the pedestrian and cycle facilities that have been agreed in the PATS are:
 - Upgrade of facilities for cyclists on Histon Road as part of the site access junction;
 - Upgrade of existing crossing on Histon Road, located between Brownlow Road and Blackhall Road, to Toucan crossing, including upgrade to shared use paths;
 - New Toucan crossing on Huntingdon Road, located just southeast of Pavilion Rd pedestrian and cycle access;
 - New Toucan crossing on Huntingdon Road, located in the vicinity of Oxford Rd;
 - Contribution to Cycle Route 13;
 - New walk and cycle signage.
- 3.2.7 The planning application site has been designed with the potential to link with additional development to the north on land within South Cambridgeshire.

3.3 Traffic Management

3.3.1 The site access junctions are designed to accommodate additional development, with 2 lanes provided on the approaches to Histon Road and Huntingdon Road, the later of which has been constructed. These junctions have been agreed in principle as appropriate for Darwin Green 2 as well with Cambridgeshire County Council and the Highways Agency.



- 3.3.2 Car Parking at the development will be provided at appropriate levels so as not to encourage car use, but to provide sufficient spaces so local areas are unaffected by on street parking. This has been agreed to be provided in accordance with the Cambridge City Council standards.
- 3.3.3 In addition the CGB will help reduce congestion on Huntingdon Road from locations on the A14 corridor, from which trips are currently made by cars using Huntingdon Road towards the city centre.

3.4 The Measures to Promote Travel Choice

- 3.4.1 The following measures have been agreed through the Travel Plan discussions as part of the PATS. They could be provided to residents of Darwin Green 1 and to those in the AWTP. The AWTP currently covers some 3,937 households in north and north west Cambridge. The AWTP could be expanded to cover a wider area of some 10,000 dwellings as part of the CTS.
- 3.4.2 The Travel Plan will be funded by the applicant for an initial period of 5 years, and will aim to be selfsustaining by the end of this period of funding.
- 3.4.3 A Travel Pack for all households will act as a reference booklet providing all travel information in one place. It will contain:
 - Public Transport information, including integrated timetables.
 - Walk Maps.
 - Cycle Maps.
 - Information on Car Share.
 - Information on local car hire, including short term hire from a local car hire company.
 - Other useful local information.
- 3.4.4 A Community Website will provide all the information in the Travel Pack but in more detail.
- 3.4.5 Incentives to use means other than the private car will be provided to residents of the development, including discounted use of the bus services for an initial period. This will involve discounted annual season tickets for the bus services for the first ticket that the initial residents purchase, up to the end of the 5 year period. This will be an agreement between the developer and the bus operator.
- 3.4.6 Transport Information Posters will be displayed at key locations on the site, such as the Bus Stops in the Community Squares and outside the Supermarket.
- 3.4.7 It is proposed to implement a School Travel Plan for the primary school on site, to promote safety and non-car travel for the journey to school.
- 3.4.8 A Car Share scheme will be available, putting residents in touch with neighbours who work in the same location. Appropriate security mechanisms will be built in to the Car Share scheme. Short term Car Hire will be facilitated, providing convenient and affordable access to a car for residents who rely on public transport for day-to-day travel.



3.4.9 Promotion of home deliveries will be facilitated through provision of safe dry storage of groceries delivered.



3.5 **Programme for delivery**

- 3.5.1 The programme from making a planning application through to first completions is set out below. Naturally this is subject to change and dependent very much on economic conditions and the housing market:
 - Resolution of outline Dec 2016
 - Signed S106 agreement Dec 2017
 - Design Code approval Mar 2018
 - RM for major Infrastructure approval June 2018
 - Commence major Infrastructure Oct 2018
 - 1st RM parcel approval Jan 2019
 - Commence 1st Housing phase May 2019
 - Complete major Infrastructure Dec 2019
 - 1st Residential occupation Dec 2019
- 3.5.2 Although the proposed residential development is not reliant on delivery of the wider A14 Cambridge to Huntingdon Improvement Scheme in any way, it is worth noting that the current programme shows that these highway works would be open to traffic in time for first completions on Darwin Green 2/3.



4. Highway Impact

4.1 Proposals to Mitigate Highway Impact

- 4.1.1 Vehicular highways improvements agreed in the PATS are:
 - Huntingdon Road access junction (completed);
 - Histon Road access junction (preliminary design agreed detailed design underway);
- 4.1.2 In addition to the access junctions in the PATS the following works were identified previously in consultation with the HA and CCoC. The works proposed a 2 lane exit northbound on to Cambridge Road and improvements to the Cambridge Road/Bridge Road junction.
- 4.1.3 Significant internalisation of trips will occur with 2 proposed schools, community facilities and food retail coming forward. In addition, employment opportunities are available at locations accessible by walk, cycle and new and existing public transport. Employment opportunities include North West Cambridge, Cambridge City Centre, Cambridge Science Park, Huntingdon, St Neots, Peterborough, London and all locations accessible from Cambridge Train Station.
- 4.1.4 As part of the pre-application discussions for the land in South Cambridgeshire, further modelling has been carried out on the local highway network that takes account of committed developments in the area using CCoC's CSRM Saturn model. These developments include the University site between Huntingdon Road and Madingley Road.
- 4.1.5 The model has enabled the impact of the development between Huntingdon Road and Histon Road, and any potential mitigation measures, to be assessed. The model runs demonstrate that, with the Cambridge Road/Bridge Road junction improvements in place, the only junctions that the development significantly impacts on are the two site access junctions. These junctions would still operate acceptably as they have always been designed to accommodate the additional housing proposed and local area models (LINSIG and VISSIM) demonstrate this. Pre-application discussions are ongoing but all parties agree that a technical solution is possible.

4.2 Construction Management

- 4.2.1 A Construction Management Plan (CMP) will set out measures to minimise the impact of construction vehicles on the local highways.
- 4.2.2 The CMP is based around the principle of restricting deliveries to the site to off-peak time periods (and defining routes that would be suitable to use during those time periods), and of setting up a depot for storage of materials on site. This principle has been accepted.
- 4.2.3 Delivery hours of 10am 2pm and 7-9pm on weekdays and 8am 9pm on Saturdays, together with the identification of specific routes that would be suitable to use during those time periods, have been discussed, and subject to some additional analysis this is likely to form the basis of an agreed CMP. Cambridgeshire County Council has agreed that the CMP issued is suitable, and many elements of the plan have also been agreed with the Highways Agency.
- 4.2.4 Works on site to mitigate noise from the depot will be required.



5. Conclusions

- 5.1.1 The Planning Application Transport Strategy (PATS) for the City planning application has been agreed, which includes measures to promote non car travel. The HA have agreed that measures to promote non car travel are the best strategy to mitigate the impact of development in this location before any A14 improvements are complete. These measures will have long term benefits also.
- 5.1.2 The Highways Agency and Cambridgeshire County Council have previously advised that they have no in principle objection to development in this location. Discussions were originally based around the A14 Ellington to Fen Ditton scheme, which was stopped in the Government's Spending Review of October 2010. However the key part of these work, to increase capacity on the A14 between Junctions 31 and 32 to the north of the Darwin Green sites, commenced in April 2014 as one of the HA's Pinchpoint schemes. The works will be completed by December 2014, well in advance of any completions on Darwin Green 1 or Darwin Green 2.
- 5.1.3 In addition, Government agreed the provision of capital investment for the wide A14 Cambridge to Huntingdon Improvement Scheme in July 2012,
- 5.1.4 Prior to announcements for either Government funded A14 improvements, Darwin Green 1 was agreed as deliverable by all parties on the basis of an Area Wide Travel Plan (AWTP) being implemented to reduce existing traffic. The AWTP would be expanded to cover up to 10,000 dwellings.
- 5.1.5 Modelling, which contained the Pinchpoint scheme and robust assumptions for the beneficial impacts of the AWTP, has demonstrated that the only significant highways impacts will be to the access junctions on Huntingdon Road and Histon Road. The access junctions have been designed to accommodate the additional traffic and therefore can cope with this increase in demand.
- 5.1.6 In conclusion, a deliverable transport solution would accompany development of the proposed land allocation within South Cambridgeshire to mitigate any transport impacts.



Appendix A

Area Wide Travel Plan – Jan 2012

NIAB1 Residential and Area-Wide Travel Plan

Barratt Eastern Counties

Project Number VN19055.01 | January 2012





NIAB1 Residential and Area-Wide Travel Plan

Document Title:	Final Report
Version:	3
Date:	January 2012
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Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
1	19.12.11	S. Hannon			Draft
2	16.01.12	L. Ampt	M. Fitch		Draft
3	24.01.12	M. Fitch	M Fitch	24.01.12	Final

Distribution of copies

Revision	Copy no	Quantity	Issued to

Printed:	2 March 2012		
Last saved:	24 January 2012 03:33 PM		
File name:	I:\CB Jobs\19055-01-X		
Author:	Jo Boyd-Wallis		
Project manager:	Jo Boyd-Wallis		
Name of organisation:	SKM Colin Buchanan		
Name of project:	NIAB1 Residential and Area-Wide Travel Plan		
Name of document:	Final Report		
Document version:	3		
Project number:	VN19055		

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Appendix 1: Policy and guidance

Appendix 2: Personalised Travel Planning Technical Note

1 Introduction

1.1 Background

- 1.1.1 This document, prepared by SKM Colin Buchanan (SKM CB) on behalf of Barratt Eastern Counties (Barratts), is the Full Residential Travel Plan (RTP) for the NIAB1 development and incorporates an Area-Wide Travel Plan. The NIAB1 site is located on the land between Histon Road and Huntingdon Road in north-west Cambridge.
- 1.1.2 Encouraging and enabling residents to form sustainable travel habits from the outset will be key to limiting the impact of this development on the local area. Therefore this travel plan will guide the implementation of a number of innovative and targeted sustainable travel measures to promote non-car modes of travel, particularly walking and cycling, as well as more responsible car use, including car sharing and the use of car club vehicles. This process will begin before the first residents move into the development and continue as an evolving process over time.
- 1.1.3 In addition to the RTP for the new NIAB1 residents, Barratts will be extending the travel plan initiative through an area-wide travel plan (AWTP). The AWTP will cover complementary areas in north-west Cambridge to stimulate travel behaviour change across a wider area. The aim is to offset the increase in car trips on the A14 that arise due to the new development. This approach has been developed in consultation with the Highways Agency and Cambridgeshire County Council, and with reference to current best practice which is cited throughout this document. The AWTP and NIAB1 travel plan will be covered by an over-arching travel plan brand, which can also be adopted by subsequent AWTPs implemented in the wider NW Cambridge area. This will then be developed into area-specific branding to enable the communities of the three different areas to take ownership of the travel plan.
- 1.1.4 In July 2010, Cambridge City Council resolved to grant permission for the NIAB1 development, subject to signing of a S106 agreement. A draft outline travel plan for this development was previously submitted as part of this application and proposed a number of measures to encourage travel by sustainable modes. This full travel plan now confirms these measures, outlines the implementation strategy, sets mode share targets for the development and describes the monitoring strategy for measuring the success of the travel plan. The travel plan adheres to local policy aims and takes advantage of the existing opportunities in the Cambridge area, particularly the pro-cycling culture.
- 1.1.5 SKM has a proven track record of implementing successful travel plans and personalised travel planning projects. The AWTP will incorporate a personalised travel planning methodology developed by SKM, which is founded upon a community-based social marketing approach to initiate voluntary behaviour change, helping people to help themselves overcome their identified travel issues and make a positive change.

1.2 Residential travel plans

1.2.1 Residential travel plans (RTPs) are management tools designed to enable the residents of a site to make more informed decisions about their travel that helps to minimise the adverse impacts of the development on the environment. This is achieved by setting out a strategy for

eliminating the barriers that prevent users of the site from using sustainable modes whilst simultaneously promoting sustainable modes as the best way to travel. A well designed and properly managed travel plan can lead to an increase in the proportion of residents travelling by sustainable modes, including walking and cycling, whilst reducing the reliance on car travel.

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- 1.2.2 RTPs offer the following benefits:
 - Reduced traffic impact on the local highway network
 - Improved health and well-being of the residential community through formation of active travel patterns
 - Reduced carbon footprint of the development site and residents themselves
 - Improved environmental credentials of the developer
 - Reduced adverse impacts of the development on local residents and businesses.
- 1.2.3 The specific objectives and mode shift targets for the NIAB1 development are set out in Chapter6.

1.3 Area-wide travel plan

- 1.3.1 As with other types of travel plan (for example a residential, school or workplace travel plan) an area-wide travel plan (AWTP) is a package of measures which support, enable and promote sustainable travel with the aim of reducing single occupancy vehicle (SOV) travel. The major difference is that an AWTP covers a larger area and a diverse group of people. Critically, the target audience is without a common structure through which to feed information, such as an employer or housing developer, and not governed by an organisation under which they can all be strongly influenced, for example through school or workplace policy. The target audience will be at different stages in their lives, with different perspectives, values and motivations. They will also have access to different modes of travel.
- 1.3.2 With these key points in mind, the primary measure of the AWTP will be the provision of personalised travel planning (PTP) advice, using one-to-one conversations to help to solve individual barriers to sustainable travel. SKM's tried-and-tested approach to voluntary behaviour change involves PTP participants being encouraged, through conversations with specially-trained Travel Advisors, to articulate a travel problem and then work out how this problem could be overcome. For example, if the participant is spending too much money every month on car travel, the Travel Advisor could help them to identify journeys which could be shared with a colleague or neighbour, then calculate how much could be saved if done on a regular basis. The materials delivered to the participant are then very specific to that solution, therefore rendering them more useful than generic information or incentives, and therefore more likely to initiate behaviour change.
- 1.3.3 The PTP offer will need to be in tune with the audience and transport variations across area and will focussing on those who have a greater propensity to change: the 'low hanging fruit'. Its measures and actions will be specific to the various opportunities and barriers in the various areas it covers, both in terms of transport infrastructure and socio-demographics.

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- 1.3.4 As well as PTP, the AWTP will implement a range of mode-specific promotions and incentives, referred to in this document as PTP Xtra. Partnership working with local authorities and stakeholders (such as Stagecoach and Zipcar) will be vital to complement and promote existing local initiatives and to help remove barriers to sustainable travel for those in the AWTP area.
- 1.3.5 The AWTP will be closely linked with the NIAB1 site-specific RTP and so a number of the measures within the travel plan will also be expanded and adapted to cover the wider residential area. The measures will primarily target residents, but also look to involve major employment destinations around the area. This will include the Cambridge Science Park, on which the Travel for Work Partnership already run a Local Travel Plan Network.

1.4 Guidance and policy

- 1.4.1 This travel plan has been developed to adhere to national and local policy, including:
 - Planning Policy Guidance 13: Transport (updated 2011)
 - South Cambridgeshire Local Development Framework
 - Cambridgeshire Local Transport Plan 3 (2011-2016)
 - Cambridge City Council Local Plan (2006)
- 1.4.2 A summary of these policy documents is included in Appendix 1.
- 1.4.3 The travel plan has also been developed with reference to the following guidance documents:
 - Draft Cambridgeshire Residential Travel Plan Guidance Supplementary Guidance (December 2010)
 - Making residential travel plans work: Guidelines for new development (2005) Department for Transport (DfT)
 - Good practice guideline: Delivering travel plans through the planning process (2009);
 - Travel Plan Guidelines (2008) Cambridgeshire Travel to Work Partnership (where appropriate to RTPs)
 - Making Personal Travel Planning Work (2007a) Department for Transport

2 Site description and existing conditions

2.1 Site location

2.1.1 The NIAB1 site is bound by Huntingdon Road to the south west and by Histon Road to the east. A public right of way marks this boundary; its alignment mostly follows the boundary between Cambridge City and South Cambridgeshire districts, running along Whitehouse Lane and then along a track towards Histon Road.

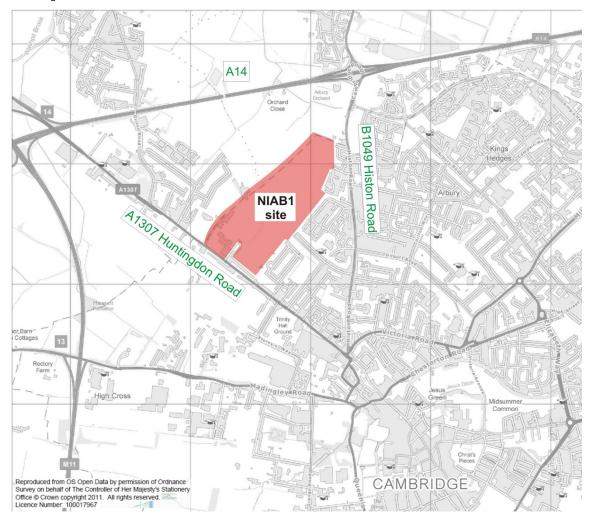


Figure 1: NIAB1 site location

2.2 Surrounding area

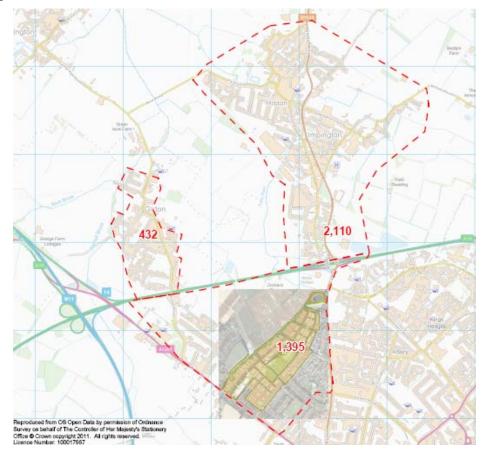
- 2.2.1 In order to define the optimum area for the AWTP, the socio-demographic characteristics of residents of seven wards located in proximity to the NIAB1 site in NW Cambridge were evaluated. The indicators used in the analysis were:
 - Tenure arrangements;
 - Economic activity;

- General health of the population;
- Qualifications.
- 2.2.2 To get an idea of the existing travel patterns of each of the wards, and therefore what barriers and opportunities exist for the area-wide travel plan, the following travel-related data was also analysed:

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- Distance travelled to work;
- Mode of travel to work;
- The number of cars per household.
- 2.2.3 In line with current findings on market segmentation and behaviour change (for example, the DfT's '*Climate Change and Transport Choices Segmentation Model*', July 2011), in order to successfully remove trips from the A14 we should be looking at relatively well-educated populations, with high levels of economic activity or student populations. The target populations also need to have fairly high rates of car use and ownership to ensure there is an opportunity to initiate a shift away from current car use. They also need to have alternative travel options available to them.
- 2.2.4 As such it was concluded that four of the wards investigated have potential as target PTP areas Castle, Girton, Histon & Impington and Milton. It was however decided that Milton was not suitable or practical for inclusion in the AWTP as it would be most difficult to manage, and is least relevant in terms of mitigating traffic from NIAB1 due to its location furthest away from the site. Therefore the area to be covered by the AWTP, shown in the map overleaf, incorporates the following communities:
 - The residential area surrounding and including NIAB1 (Castle Ward)
 - Girton
 - Histon & Impington
- 2.2.5 The number of households in these communities has been counted using GIS postal address data, using the MapInfo programme, to give an approximate number of households that will be targeted by the AWTP. The area boundaries and the number of households are shown in Figure 2. The total comes to 3,937 households.





2.3 Local highways

2.3.1 The A14 northern bypass runs to the north of the site, with local access possible at the Histon Junction with Histon Road, and the Girton Interchange junction with the M11 and Huntingdon Rd. South east of the site Huntingdon Road and Histon Road join at the junction with Victoria Road.

2.4 Cycling and walking

- 2.4.1 There is a good network of cycle routes in the area of the site. There are wide, well-used cycle lanes on both Histon Road and Huntingdon Road whilst an orbital cycle route follows the northern boundary of the site. In particular, 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, available on the Cambridge City and Cambridgeshire County Council websites, 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. There are additional marked local link routes running through the city centre.
- 2.4.2 There is a cycle shop (Chris's Cycles) located just a few minutes to the west of the site in Thornton Way which will be very convenient for cyclists in the new development, and a number of other cycle shops in the local area.

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- 2.4.3 Cambridge has extensive cycle parking options, including two cycle parks located at the Grand Arcade and Park Street, both in the city centre. The Grand Arcade is Britain's biggest free indoor city centre cycle park providing space for 282 cycles in a variety of cycle racks and lockers. As a Cycling City, there has been a programme of investment in infrastructure and parking facilities, and the Travel for Work Partnership has been running a "Take a Stand" scheme to help workplaces around the city install cycle parking through match funding.
- 2.4.4 Cambridge railway station has a vast forecourt with cycle parking facilities and, as well as providing an excellent parking facility, it gives visitors arriving by train a powerful first impression of the city's pro-cycling culture.
- 2.4.5 Figure 3 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 captured by this catchment, including many other surrounding villages and areas that host popular transport links.
- 2.4.6 Cambridge station is also included within this catchment, facilitating the option for residents to make multi- modal, sustainable trips.

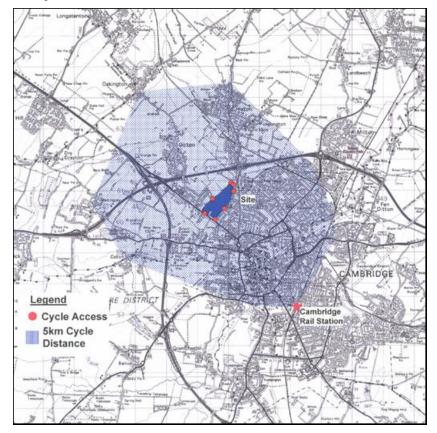


Figure 3: 5km cycle catchment

2.4.7 The site lies to the north and west of an existing residential area with good pedestrian facilities that connect with the city centre and the local area. Both Histon Road and Huntingdon Road

have good facilities for pedestrians, with wide pavements and crossing facilities along the routes.

2.4.8 Figure 4 illustrates a 2km walking distance from the site. The map shows, much of the city centre is within a 2km walk giving great scope for encouraging this mode.

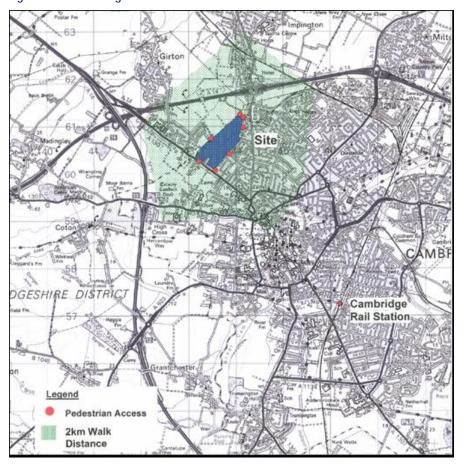


Figure 4: 2km walking catchment

2.5 Public transport

Buses

- 2.5.1 The site is well served by buses, with stops within a 400 metre walk of a substantial part of the development providing frequent bus services.
- 2.5.2 At least seven buses per hour run along Huntingdon Road in each direction, to and from the city centre as the Citi 5, 2 and 6 services. Connections to other bus services, including high frequency links to Cambridge rail station, can be made in the city centre. The Citi 7 bus service also runs past the site along Histon Road every 10mins (6 an hour) in each direction during the day. The Citi 7 provides direct links to Cambridge railway station via the city centre. Bus route no. 14 operates twice an hour during the day, and goes to the Addenbrooke's Hospital and Trumpington via the train station and the city centre. The frequencies of the buses are detailed in Table 2.1.

Table 2.1: Bus services

				Frequ	lency		
		М	onday-Frid	ау	Satu	rday	Sunday
		Morning Peak (8- 9am)	Daytime (10- 4pm)	Evening (5-6pm)	Daytime	Evening (post 7pm)	Daytime
Along Hunting	don Road			-	-		
Citi 5	St Ives- Cambridge	3	Every 20 mins	3	Every 20 mins	Every 20 mins	Hourly
55	Cambridge- Huntingdon	3	Every 20 mins	3	Every 20 mins	Every 20 mins	No Sunday Service
Citi 6	Oakington- Cambridge	3	Every 20 mins	3	Every 20 mins	Every 20 mins	Hourly
1A	Peterborough- Huntingdon	No service			No service		3 services
Along Histon	Road				-		·
Citi 7	Cattenham- Saffron Walden	6	Every 10 mins	6	Every 10 mins	Every 10 mins	Every 30 mins
14	St Andrews Street - Arbury Circular	No service	Every 30 mins	No service			No Service
В	Orchard Park- City Centre	No Service		4 Services, hourly from 6pm	5 Service from		

2.5.3 For the wider AWTP area, Girton is served by the Citi 6 bus, described above. Histon and Impington are served by the Citi 8 bus which runs every 20 minutes between Addenbrookes Hospital, the city centre and Cottenham.

Cambridge Guided Bus

2.5.4 The Cambridge Guided Bus opened in August 2011 and provides high quality, reliable and frequent local public transport along the A14 corridor. Buses travel on a guide-way along the disused railway line from Huntingdon and St Ives to the edge of Cambridge. All three routes run through Histon, giving a combined frequency of a bus approximately every 10 minutes during the day on weekdays.

Rail services

2.5.5 Cambridge railway station is situated to the southeast of the city centre within a 5km journey from the site. It provides frequent services to London, Manchester, Liverpool, Sheffield, Kings Lynn, Norwich and Ipswich. The frequencies of these services are detailed in Table 2.2 below.

Destination	Journey	Frequency					
	time	Monday-Friday			Satu	Sunday	
		Morning Peak (8- 9am)	Daytime (10- 4pm)	Evening (5-6pm)	Daytime	Evening (post 7pm)	Daytime
London Kings Cross	50 mins- 1hr 20mins	6	4-5 per hour	4	4-5 per hour	4-5 per hour	4 per hour
Manchester	3-4 hours	5	4 per hour	3	3 per hour	1-2 per hour	2 per hour
Liverpool	4-5 hours	3	2 per hour	2	3 per hour	2-3 per hour	2 per hour
Sheffield	2-3 hours	2 per hour	2 per hour	3	2 per hour	2 per hour	1-2 per hour
Kings Lynn	45 minutes	2 per hour	Hourly	1	Hourly	Hourly	Hourly
Norwich	1hr 20	2	2 per hour	3	3	2-3 per hour	2 per hour
lpswich	1 hr 20mins	2	2 per hour	1	2 per hour	1-2 per hour	2 per hour, every other hour

Table 2.2: Rail services from Cambridge

2.6 Car clubs and car sharing

Car clubs

2.6.1 A developer funded marketing and incentive package will be negotiated to help ensure a high level of car club usage. Zipcar has been operating in the Cambridge since 2007 and is now working in partnership with the council to provide car clubs on-street to residents. There are currently 21 vehicles in the city and over 1500 members.



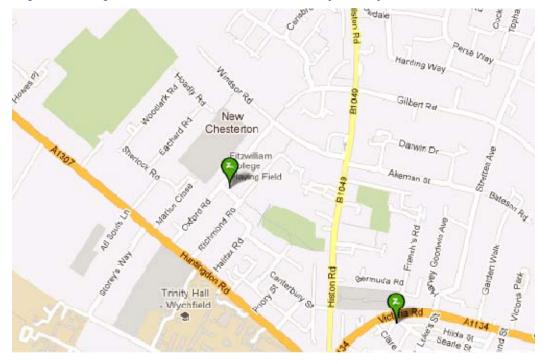


Figure 5: Existing car club vehicle locations in NIAB1 locality (January 2012)

Car Sharing

- 2.6.2 CamShare, run by LiftShare, is a joint initiative between Cambridgeshire County Council and the Travel for Work Partnership. It is promoted to employers throughout Cambridge for encouraging car sharing for commuters and is also open to members of the public to find car share matches for all types of journeys. More details are available at www.camshare.co.uk.
- 2.6.3 For cyclists and potential cyclists, CamShare also includes LiftShare's BikeBUDi tool, through which members can find someone to show them the best cycle route and/or to provide company and support during a cycle journey.

2.7 Smarter travel initiatives

2.7.1 The County and City Councils are both pro-active in terms of supporting sustainable travel initiatives and infrastructure and this sets the context to the travel plan for this site. The NIAB1 travel plan will seek to perpetuate existing and future projects and branding wherever possible and take full advantage of existing travel awareness and travel information materials. Some specific campaigns/projects are outlined below.

Travel for Work Partnership and the Travel Plan Plus Local Travel Plan Network

2.7.2 It will be important for the RTP and AWTP to tie in with workplace travel plan initiatives, which in Cambridge are coordinated by the Cambridgeshire County Council Travel for Work Partnership. This will enable residents to be aware of employers who carry out travel plan initiatives, such as the Cycle to Work Scheme, car sharing and public transport season tickets loans, tying in travel planning at the journey origin and at the destination.

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- 2.7.3 The Travel for Work Partnership is also involved with the development of a Local Travel Plan Network (LTPN) at the Cambridge Science Park, which is likely to be an important employment destination for the new development, due to the numbers employed there and the location approximately 2km to the east of the development.
- 2.7.4 The project is part of the European Travel Plan Plus project, which aims to set up LTPNs in four varying situations across Europe to share their findings and experience across the continent. The project is funded by Intelligent Energy Europe programme which comes from the European Commission's Executive Agency for Competitiveness and Innovation.
- 2.7.5 The LTPN team have carried out roadshows, introduced electric bikes to hire, listened to the issues of employers and employees to improve access for cyclists and pedestrians and solved some practical travel issues (such as improving cycle access onto the site) through working with colleagues in the City Council. The team continues to work on improving sustainable travel options, including the car club presence and car sharing uptake.

School travel plans

- 2.7.6 As well as supporting schools to write, implement and monitor travel plans, Cambridgeshire County Council's School Travel Advisors also promote and run a number of projects in the area for schools to take part in. These opportunities will be promoted to all residents as well as through the new primary school to help raise awareness of the benefits of travelling actively and sustainably to school. At the time of writing the current projects include:
 - WoW (Walk Once a Week)
 - Bikeability and Pedal Power (off-road) cycle training
 - Pedometer loan scheme
 - Walking passports
- 2.7.7 As an ongoing process, the travel plan will adapt to promote and take advantage of any new infrastructure enhancements and new smarter travel initiatives that are introduced by the City and County Council.

3 Development proposals

- 3.1.1 The NIAB1 development consists of a total of 1,780 dwellings; this comprises 1,593 homes to be built by Barratt Eastern Homes plus a further 180 by David Wilson Homes, granted permission under a separate planning application. Also on the site, development is permitted for:
 - A primary school
 - Community hall
 - Approximately 1,200m² retail plus up to 6 smaller retail units (up to 100m²)
- 3.1.2 Car parking will be provided at a ratio of 1.5 spaces per dwelling.

3.2 Cycle parking

3.2.1 Cycle parking will be provided in line with Cambridge City Council cycle parking standards and will be covered, conveniently located and secure. Short stay cycle parking (in the form of Sheffield stands) will also be provided for visitors in prominent locations by the retail and community areas. The exact locations of the cycle parking will be confirmed during the detailed design stage.

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3.3 A new bus service

3.3.1 A dedicated bus service connecting the development with the city centre will be provided through the site and will run at a frequency of every 15 minutes. Bus stops will be located to ensure that a bus stop is within 400 metres (5 minute walk) of every dwelling at the development. The bus service will commence when the development reaches the stage that homes are no longer within a 400m walk of the existing services. Discussions are currently underway with Stagecoach as to how best to provide this service, which will likely be an extension to an existing bus route.

4 Current travel patterns

4.1 Baseline travel data

- 4.1.1 The targets for the NIAB1 site and wider area are based on data from a comparable residential area in north-west Cambridge.
- 4.1.2 A household travel survey was undertaken on the 9th December 2010 in order to establish an up-to-date mode share baseline on which to build SMART travel plan targets. The aim was to assess the current travel patterns of an analogous location to the NIAB1 site in terms of walking, cycling and public transport accessibility, and with a mix of housing types.
- 4.1.3 The survey covered 621 residential properties on the Woodhead Drive residential area (off Milton Road) in the north of Cambridge. 103 survey forms were returned, giving a response rate of 18%. Based on this response rate, the confidence interval for the mode share calculated from responses will be just over 5% and this is considered to be generally representative of the population as a whole.
- 4.1.4 The mode share of residents in Woodhead Drive is given in Table 4.1.

Mode	Mode Share
Car driver	39%
Car share	13%
Bus	8%
Train	1%
Walk	15%
Cycle	22%
Motorcycle	1%
Тахі	1%

Table 4.1: Mode share at Woodhead Drive (2010)

4.1.5 Mode shift targets for this travel plan have been derived from these results and can be found in Section 6.

5 Area-wide travel plan – best practice

5.1 Introduction

5.1.1 In order to establish the most effective approach for the AWTP measures, as set out in the following chapters, it is necessary to review best practice and lessons learnt from other similar initiatives, and to look at academic research into the subject. SKM CB has carried out comprehensive research into this subject, a summary of which is provided here, and more details on PTP projects contained in a Technical Note attached in Appendix 2. The results achieved in other, similar projects will be used to set a SMART target for mode shift to be achieved as a result of the AWTP.

5.2 Sustainable Travel Demonstration Towns (STDTs)

- 5.2.1 The three STDTs (Darlington, Peterborough and Worcester) each implemented an intense, town-wide programme of smarter choices measures from 2004 to 2009. Each town chose how much to spend on a range of different measures; all three towns spent the most on PTP (from a third to nearly half of revenue spending), followed by travel awareness campaigns, promoting walking and cycling, public transport marketing, then smaller amounts on workplace and school travel plans. The programmes were implemented by teams of 6-10 staff in each town.
- 5.2.2 Across the three towns, **car driver trips by residents fell by 9% per person**, and car driver distance by 5%~7%. This compares with a fall of about 1% in medium-sized urban areas over the same period.

5.3 Smarter Travel Sutton

- 5.3.1 Following on from the STDTs, London launched its own pilot project in the London Borough of Sutton. Whilst travel issues in London differ greatly to those in Cambridge, Sutton is an outer London borough with suburban areas with similar levels of transport to NW Cambridge. The project, known as Smarter Travel Sutton, used social marketing and travel planning to reduce SOV use over the course of three years. This was achieved through workplace and school travel planning, incentives and rewards, campaigns, roadshows and festivals (with memorable, consistent branding), improved facilities (Zipcar and new increased cycle parking) and PTP.
- 5.3.2 The Sutton project was measured against a control area, the neighbouring borough of Croydon. In Sutton, over the course of the 3 years from 2005/06 to 2009, car mode share saw a reduction of 2% from 46% to 44%. In comparison, in Croydon it increased from 42% to 48%, an increase of 6%. This demonstrated a relative **reduction of -8%** in Sutton compared to Croydon.
- 5.3.3 In addition, in travel surveys in the two boroughs in Year 3 of the project, 3% of respondents in Sutton stated that they cycle at least 5 times a week, compared to just 1% in Croydon.

5.4 Local Travel Plan Networks (workplace)

5.4.1 The majority of LTPNs (also known as Business Travel Networks (BTNs)) have covered business parks and town centres and they are therefore focussed on staff travel i.e. the area targeted is the destination rather than the origin of the trip. There are however still a number of important lessons to learn from these previous projects, which we can apply to the NW Cambridge AWTP.

- 5.4.2 Most relevant to the AWTP is the LTPN at the Cambridge Science Park. The LTPN is a network of organisations, coordinated by staff who are based full-time in a Commuter Centre on site.
- 5.4.3 Site wide travel surveys are carried out annually in October. Overall, 52 workplaces have taken part in the project at some stage, with 14 taking part in the surveys in both October 2009 and October 2010. The mode shift results are derived only from the survey results of these 14 businesses in order to compare like with like. In this time the project has seen a **-5% mode shift from SOV travel**, a 4% increase in cycling, 2% increase in walking and 1% increase in working from home. There has also been a further decrease in rail and bus use, each falling by 1%.

5.5 Personalised travel planning

- 5.5.1 PTP has also been carried out in various areas across the UK. The scope and range of PTP varies greatly, providing a range of approaches and lessons learnt to consider in the establishment of a PTP programme in NW Cambridge.
- 5.5.2 In 2007, the DfT published 'Making Personal Travel Planning Work: Research Report'. Within this report, a number of projects were reviewed and PTP practioners interviewed. It was concluded that in the UK PTP was found to **reduce car driver trips by 11%** (amongst the targeted population) and the distance travelled by car was reduced by 12%. This translates to a -4% shift in car driver trips. Walking was found to be the main beneficiary, gaining an average mode share increase of +3%. A full analysis of previous PTP projects is included in Appendix 2.

PTP in NW Cambridge

- 5.5.3 There have been two PTP projects carried out in the NW Cambridge area in recent years; Arbury Park (also known as Orchard Park) and Kings Hedges. The first PTP project to take place in Cambridge was that at Arbury Park, a new mixed-use development in the north of Cambridge (north-east of the NIAB1 site, just south of the A14). The Kings Hedges project followed to see how PTP would work in an existing residential area.
- 5.5.4 Similar methodologies were carried out for both projects. The approach was to send an introductory letter, informing the household that a travel advisor would be visiting in the next couple of days. The travel advisors went door to door and entered into a short conversation with the participant to establish their current journey and travel patterns. At the end of the conversation, the travel advisor agreed to send tailored information and appropriate incentives (such as a bus voucher, cycle training voucher or individualised travel plan). In return, the participant agrees to trial a sustainable mode once they have received the information and incentive.
- 5.5.5 A comparison of the Arbury Park and Kings Hedges PTP projects is provided in Table 5.1:

	Arbury Park	Kings Hedges
Number of households targeted	300	433
Participation rate	65%	23%
After survey response rate	43%	40%
% of respondents who tried to bus	74%	57%
% of respondents who tried cycling	40%	31%
% of respondents who tried walking	48%	12%

Table 5.1: Comparison of PTP projects in NW Cambridge

5.5.6 The projects, and comparisons between the projects, have resulted in a number of lessons learnt:

- Taking advantage of a significant life change, such as moving into a new house as was the case at the Arbury Park, was seen to be more successful than approaching people who were well-established in their travel habits.
- Socio-demographics are important: Less affluent areas may have less propensity for mode shift due to higher levels of sustainable travel and lower car ownership.
- Monitoring 12 months later would be beneficial to identify whether there has been a sustained behaviour change.
- In both cases, the free bus tickets were seen as a very effective measure to get people to try a new mode, but the month-long pass was much better received than the day pass. However, longer-term incentives would be useful in order to encourage a sustained mode shift.
- Bus maps and timetables were the most popular piece of information, followed by cycle maps.

6 Objectives and targets

6.1 Aims and objectives

- 6.1.1 The overarching aims of this travel plan is to reduce car travel (particularly in single occupancy vehicles), and, most importantly, to maximise the use of the most sustainable modes, cycling and walking, for all journey types.
- 6.1.2 The objectives are as follows:
 - 1. To reduce the number and proportion of SOV trips from and to the target areas, particularly those that would be contributing to peak hour congestion on the A14.
 - 2. To raise awareness of the availability of relevant and feasible alternatives to SOV travel and the financial, health and environmental benefits of using the alternative modes.
 - 3. To incentivise car drivers to try an alternative mode of travel and then to sustain this new travel behaviour.
 - 4. To support the implementation of a range of initiatives to overcome the barriers to using sustainable modes of travel for all types of trips, including commuting, retail, leisure and education trips.
 - 5. To promote the smarter choices 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.

6.2 NIAB1 targets

- 6.2.1 In line with Cambridgeshire's draft RTP guidance, initiation of the monitoring programme will be triggered at 50% occupation. At this trigger point an initial travel survey will be carried out to ratify the baseline mode share. Mode shift targets are then set to be achieved by 5 years after this trigger point. More details on the monitoring schedule are detailed in Section 9 of this travel plan.
- 6.2.2 The targets are set for journeys carried out in the AM peak (when congestion problems are greatest) and are guided by the travel patterns of residents at the Woodhead Drive site to ensure they are realistic. The indicators for the travel plan targets will be the mode share results from annual household travel surveys.
- 6.2.3 The NIAB1 travel plan targets aim to achieve and exceed the sustainable travel mode share at Woodhead Drive which is set as the baseline mode share. Bearing in mind that the Woodhead Drive site is closer to the city centre than the NIAB1 site and there is a significantly lower car ownership ratio than has been agreed at NIAB1 (0.97 cars per household at Woodhead Drive, compared to a car parking ratio that allows for 1.5 spaces per dwelling for NIAB1) these targets are stretching but achievable. The bus target is particularly aspirational but believed to be

achievable, owing to the investment in bus infrastructure and marketing that will come as a result of the NIAB1 development.

6.2.4 The headline target is a 5% shift away from 'Car Driver' ('car driver' includes those who drive alone and take a passenger). The targets are as follows:

	Baseline*	3 rd Year (interim)	5 th Year	5 Year Mode Shift
Car driver	39%	36%	34%	-5%
Car share	13%	12%	12%	-1%
Bus	8%	10%	11%	+3%
Train	1%	1%	1%	-
Walk	15%	16%	16%	+1%
Cycle	22%	23%	24%	+2%
Motorcycle	1%	1%	1%	-
Taxi	1%	1%	1%	-

Table 6.1: Mode shift target for NIAB1

- 6.2.5 In order to shape new residents' travel habits from the outset many of the key travel plan measures will be in place prior to or at first occupation, so the biggest shift in mode share from the car is intended to be achieved within the first 3 years as residents move onto the site.
- 6.2.6 Once the targets are achieved, the travel plan measures will then focus on sustaining and increasing the sustainable travel mode share, continuing to encourage and support residents to make more sustainable travel choices.

6.3 Area-wide travel plan target

- 6.3.1 The AWTP target will be achieved through the implementation of a PTP strategy and other associated initiatives (as outlined in Chapter 8). The targets are based on the 2007 DfT research report 'Making Personal Travel Planning Work' which is regarded as having the strongest evidence regarding the success of PTP projects. This research report concluded that PTP can achieve an 11% reduction in car driver trips, which equates to a 4% percentage point decrease from a baseline of 39% SOV mode share. More information on how this target has been set can be found in the PTP Technical Note attached in Appendix 2.
- 6.3.2 As the sustainable travel options vary across the areas to be targeted by the AWTP it is not appropriate to set corresponding targets for the other modes, but it is predicted that car sharing will be likely to increase in the villages, use of the Guided Busway will increase in Histon and cycling will increase in the areas closest to the city centre.

Table 6.2: Mode shift target for the AWTP

	Baseline	3 rd Year	3 Year
	(2012)	(2015)	Mode Shift
Car driver	39%	35%	-4%

6.3.3 The PTP strategy will be initiated in 2012, prior to the completion of the NIAB1 development. In order to have maximum impact it will be implemented over a shorter time period than the RTP and therefore the target timescales do not align with those of the NIAB1 residents. Instead, monitoring will occur annually over a period of three years after the first phase of PTP. As with the RTP, progress towards the targets will be measured through annual travel surveys.

7 Management

7.1 Overview

7.1.1 The NIAB1 travel plan and AWTP will be intrinsically linked yet will run at different timescales and intensity. The AWTP will be centred on the PTP project, the scale of which will require a stand-alone project manager. As such, the travel plan strategy, activities and monitoring will be led and implemented by a Travel Plan Coordinator, who will appoint a PTP Field Office Manager to run the PTP project.

Travel Plan Coordinator

- 7.1.2 The role of Travel Plan Coordinator for the NIAB1 site will be fulfilled by a member of the Sustainable Travel Team at SKM Colin Buchanan. The primary contact for residents at initial occupation will be Jo Boyd-Wallis, whose contact details are provided below:
 - Tel: 0207 939 6149
 - Email: jboyd-wallis@globalskm.com
- 7.1.3 Any changes in primary contact details will be passed on immediately to all stakeholders, including Cambridgeshire County Council and Cambridge City Council. SKM Colin Buchanan will continue in this role throughout the agreed monitoring period (expected to be three years following full occupation of the development).
- 7.1.4 The role of Travel Plan Coordinator will be undertaken on a part-time basis, with the amount of time dedicated to the travel plan varying over time as required. Additional resources will be supplied as needed, such as immediately prior to and immediately following initial occupation of each phase of the development and during the annual monitoring process.
- 7.1.5 The Travel Plan Coordinator will undertake the following duties:
 - Develop the Travel Information Pack and website, and keeping this up-to-date
 - Work with the PTP Field Office Manager to coordinate the PTP project and implement PTP sessions at NIAB1
 - Attend local events to promote sustainable travel
 - Conduct all monitoring activities, described in detail later in this chapter
 - Prepare and submit the Annual Monitoring Report
 - Be the point of contact for residents if they have any travel issues or suggestions
 - Work with stakeholders and service providers including the County and City Councils, Stagecoach, the Cambridge Cycling Campaign, local cycle shops etc.

Field Office Manager

7.1.6 The PTP Field Office Manager role will be a temporary position required on a full-time basis during the implementation of the PTP phases. They will be employed locally and will work out of a local field office. While as yet it is not certain where this will be located, it will be in the

vicinity of the AWTP area and it is suggested that this office could be on the NIAB1 site (i.e. part of the Marketing Office) or potentially in the County Council offices at Castle Hill to enable integration with existing local initiatives and information.

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7.1.7 The Field Office Manager will be an individual with excellent local knowledge and experience in running PTP projects. They will be provided with a budget and will be responsible for recruiting and training a team of Travel Advisors for each Phase who will carry out the PTP project as described in Section 8.4.

Stakeholder Group

7.1.8 We recommend that prior to the implementation of the measures detailed below, a stakeholder consultation workshop should be held to bring together local authority sustainable travel officers and interested parties such as LiftShare, bus operators and the Cambridge Cycling Campaign. This will help ensure the AWTP can incorporate any campaigns being offered by local groups and to gather feedback on the potential impact of the various measures proposed. This group should then be kept up to date with progress of the plan and invited to provide feedback and ideas on the implementation.

Summary

7.1.9 The travel plan management structure is summarised in Table:

Travel Plan		PTP Field Office	Stakeholder Group
	Coordinator	Manager	
Staffing	SKM Colin Buchanan Transport Planner	Contractor	Cambridge City and County Council reps; local operators/groups; Community leaders
Base	London (with frequent visits to site)	Cambridge (potentially in Sales office on NIAB site)	Cambridgeshire
Employment type	Permanent, part-time (flexible with campaigns, monitoring etc.)	Temporary, full-time for duration of PTP project	N/A
Responsibilities	 Implementing NIAB1 Travel Plan; Appointing PTP Field Manager; Training PTP Field team; Implementing PTP Xtra; Stakeholder liaison. Monitoring. 	 Appointing PTP Travel Advisors; Managing PTP implementation; Supporting PTP Xtra where appropriate. 	 Support with relevant activities; Keeping TPC up to date with latest initiatives; Promotion to other developers for extending AWTP activities.

Table 7.1 Travel Plan Management

7.2 Funding

- 7.2.1 The NIAB1 travel plan will be funded entirely by Barratt Eastern Counties in their position as site developer. In their role as Travel Plan Coordinators, SKM Colin Buchanan will be provided with a budget by Barratt Eastern Counties for travel plan implementation. The budget will cover the time of the Travel Plan Coordinator, publication of materials, vouchers or discounts provided to residents and the monitoring costs.
- 7.2.2 The PTP project, covering the area identified in Section 2.2, will also funded by Barratts. This will include the employment of a PTP Field Officer, the Travel Advisors and all associated travel information materials. The project will look to use existing schemes across Cambridge and Cambridgeshire to reduce duplication of materials and resources.
- 7.2.3 Monitoring, by way of travel surveys at NIAB1 and across the AWTP area, will also be funded by the developer.

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8 Measures

8.1 Overview

- 8.1.1 The NIAB1 RTP and the AWTP will be implemented as a package of measures, designed to work collectively to overcome the various barriers and encourage a switch to sustainable travel. The aim is for nudges and prompts to come from many sources, the combined effect of which will trigger the required level of travel behaviour change across the population. The AWTP will be closely linked with the NIAB1 site-specific travel plan and so a number of the measures within the travel plan will also be expanded and adapted to cover the wider residential area.
- 8.1.2 The measures will primarily target residents, but also look to involve major employment destinations around the area. This will include the Cambridge Science Park, on which the Travel for Work Partnership already currently run an LTPN.
- 8.1.3 The measures in this travel plan build upon those recommended in the RTP Guidance's toolkit of residential travel planning measures. The vast majority of measures on that list are included, and where necessary justification is provided for those measures that are omitted.
- 8.1.4 In particular, at this site we will be focussing on encouraging walking and cycling, taking advantage of the pro-cycling culture and smarter travel initiatives that already exist in Cambridge, and also on promoting bus use, through new and improved facilities and encouraging use of existing services. Rail will be an option for some residents, in conjunction with other sustainable modes, but it will not be the primary focus due to the distance from the rail station.
- 8.1.5 In terms of infrastructure and highways improvements, the key features are described briefly here but for a more detailed explanation and drawings please refer to the Transport Assessment.

8.2 Travel plan brand and identity

- 8.2.1 The AWTP and NIAB1 travel plan will be covered by an over-arching travel plan brand, which can also be adopted by subsequent AWTPs implemented in the wider area. This will then be developed into area-specific branding to enable the communities of the three different areas to take ownership of the travel plan.
- 8.2.2 Targeting the audience in this way will ensure that the travel plan measures meet the needs of the specific communities, and that the relevant local transport facilities and other services can be promoted to the relevant audience, whilst providing a recognisable 'umbrella' brand which can be applied to new areas as the project develops.

8.3 Travel awareness, information and marketing

Websites and social marketing

- 8.3.1 Travel information will be available on the development's sales website, with a clear focus on the opportunities for sustainable travel and the safe and quiet environment of the streets. The website will be aimed at visitors as well as residents.
- 8.3.2 The Travel Plan Coordinator will develop a website specifically for the travel plan which be promoted to both NIAB1 residents and those engaged through the AWTP. It will contain much the same information as the Travel Information Pack (see below), as well as links to current campaigns and regular news on what has been happening around Cambridge in relation to sustainable travel. Travel plan documents, including monitoring reports, will also be available on line.
- 8.3.3 The Travel Plan Coordinator, and other parties such as the BUG, will also use social media to promote travel plan initiatives. This could include setting up a LinkedIn or Facebook group for NIAB1 and the AWTP, and also linking into existing local online groups and information services.

Noticeboards

8.3.4 Travel plan noticeboards will also be installed at key points around the development, providing up to date travel information, particularly maps showing walking and cycling routes (with journey times) around the local area. This will help residents and visitors to the site gather information on how to sustainably travel to and from the site in future.

Travel Information Packs

- 8.3.5 A Travel Information Pack will be designed and distributed to all NIAB1 residents by the Travel Plan Coordinator. The packs will be distributed on occupation to have an immediate impact.
- 8.3.6 The packs will include the following:
 - Location map of the site highlighting the travel related facilities such as bus stops and cycle stands
 - A wider map showing walking and cycling routes and journey times to key employment destinations such as the Science Park, local shops, schools and other services
 - Site specific public transport information including up to date local service timetables and routes
 - A summary of the distance and travel times to key destinations by various modes, plus an indication of the number of calories burnt and carbon emissions saved for journeys by walking and cycling rather than the private car
 - The offer of a PTP visit from a Travel Advisor to help with journey planning and travel information
 - Links to relevant local websites with travel information, including the County and City Council websites, <u>www.tfw.org.uk</u> (Travel for Work), <u>www.transportdirect.info</u>,

<u>http://www.cambridgeshire.gov.uk/transport/around/buses/</u> and the bus and guided bus company websites, <u>www.walkit.com</u> and cycling organisations

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- Details of the benefits of car sharing and information on CamShare
- Car Club information including details of promotions and memberships deals for residents (see below)
- Information about the travel plan and its key objectives
- Details of cycle training sessions and information on locking your bike
- A feedback form and contact details for the TPC
- 8.3.7 The feedback survey form will be enclosed in the travel information pack which can be submitted at any time to the Travel Plan Coordinator and also available online. The feedback from these forms will assist in gathering information about perceived transport choices and any ideas on ways to improve the travel plan. Results of this will be included in monitoring reports and steering group meetings.
- 8.3.8 The packs will be kept up to date by the Travel Plan Coordinator and revisions will contain the results of any monitoring, targets and achievements. It is important to provide details of achievements, as success will further add to the promotion of the travel plan, raising awareness and increasing the desire to achieve further goals. The packs will also be supported by the website, which will provide residents with information on new campaigns and information long after they move into the site.
- 8.3.9 Travel Information Packs will not be distributed in the same format to participants in the PTP programme. Instead, information will be more targeted according to the issues and opportunities identified during the PTP conversation with the Travel Advisor.

Information for marketing offices and show homes

8.3.10 The Sales team will be fully briefed on the sustainable transport opportunities at the development. An information sheet will also be produced and displayed within the on-site marketing office and show homes to promote the travel plan including initiatives and its objectives. This can be then be distributed to prospective home owners to further promote the concept of the travel plan and its aims prior to home occupation. In this way, the accessibility by cycling, walking and public transport, and the availability of a pay-as-you-go car will be promoted as a key selling point of the development.

Events and campaigns

8.3.11 The travel plan will be launched at NIAB1 when the development reaches an appropriate level of occupation, anticipated to be at 50%. The launch event will showcase the facilities offered by the development, services such as CamShare and bike loan (see following paragraphs on measures), distribute travel information and promote personalised travel planning sessions. Interested parties from outside the development, such as the Travel for Work staff and local cycling groups will also be invited to promote themselves and their projects. If possible the launch will tie into a wider event, such as a national environmental awareness week or Bike Week to raise the level of interest.

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8.3.12 The Travel Plan Coordinator will run travel awareness events throughout the year to help promote the travel plan initiatives and the wider PTP project, linking into national and local campaigns and also existing community events such as fêtes. Events will also be organised to launch new services, for example when a new car club vehicle is introduced. They will also encourage residents to participate in School Travel Plan events for the onsite school and local schools as necessary.

8.4 Personalised travel planning (PTP)

- 8.4.1 The primary measure for both the NIAB1 and AWTP will be PTP, but it will be implemented in two different ways in order to best suit the two types of audience: new residents moving into NIAB1 and existing residents of the AWTP area. The PTP for NIAB1 will be offered to every resident as they move in. Due to the extended timescale of the build-out, this is likely to be over a number of years, likely to be up to 7 or 8 years from the first completion.
- 8.4.2 Conversely, as a Condition of planning permission, implementation of the AWTP needs to be commenced prior to the first occupation of NIAB1 and in order to create the most impact the PTP should be implemented intensively over a shorter amount of time. It is envisaged that a pilot will be run in Girton (north of the A14) as it is small, self-contained and does not need to be timed to link in with the roll out of bus or cycle infrastructure related to NIAB1. Three more intensive phases will then be rolled out with increased staff resource in a) Histon b) Impington and c) Girton (south A14) and Castle, completing the PTP for existing residential areas in two years.
- 8.4.3 The PTP initiative for both types of audience will take into account the advice in the DfT's 2008 publication "Making Personal Travel Planning Work: Practitioners' Guide", the SKM methodology of conversations to identify issues and solutions (personal responsibility), as well as the evaluation reports for the PTP projects considered in the Chapter 5. Our proposed approach (described in the following paragraphs) will be subject to discussion with Cambridgeshire County Council throughout its development and implementation.

Implementation (NIAB1)

8.4.4 PTP will be offered to each NIAB resident as they move in to ensure they are able to discuss their travel options before they form travel habits. The PTP conversation is likely to be undertaken by the TPC, but will follow a very similar approach to that used by the PTP Field team in the AWTP as outlined below.

Implementation (AWTP)

- 8.4.5 The team of Travel Advisors will need to be recruited locally (potentially through the University) and managed by PTP Field Office Manager who will also have a local base from which to work.
- 8.4.6 The relative benefits of making contact by phone or by door-knocking are discussed in the Technical Note in Appendix 2 and it has been concluded that, despite the higher costs of door-to-door contact, the potential for it to achieve higher contact and participation rates (and therefore potentially affect greater mode shift) makes it the preferred method for this project.

8.4.7 The PTP programme will be advertised using local media including newspapers, radio and posters, through links with local community groups, and also on Cambridgeshire County Council's transportation webpages. This will ensure when the team knock on doors their appearance is not 'out of the blue'.

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- 8.4.8 Following the *personal responsibility* approach, as advocated by Ampt & Engwicht (2007), during the conversation with the PTP Advisor, participants will be invited to discuss their situation and identify problems which they would like to solve (such as being delayed in traffic jams, not being able to fit in enough physical activity etc.) They will then be encouraged to discuss potential solutions and then offered a travel information pack which will contain detailed information on the transport opportunities and local services that are available as a solution to the issues they have identified. The Travel Advisor will be trained to gauge what information and incentives they require. The incentives offered will be directly related to their propensity to switch from car use to another mode. For example, if a resident currently cycles to work but drives for shopping and leisure trips, providing a weekly bus pass would not be appropriate or effective; instead they could be offered help to overcoming the barriers to cycling to destinations other than work. This will also ensure that they will be aware of the travel information pack before it arrives and it will be tailored to their needs so it will not be disregarded as junk mail.
- 8.4.9 As the PTP project will principally focus on reducing car use, the incentives offered will be those most effective in enabling a switch in travel habits from drivers currently using the A14, particularly for peak hour journeys.
- 8.4.10 In order to maintain momentum, those receiving free PTP sessions will be asked to provide their email addresses in order to send them updates to the information and details of new campaigns and incentives, sustaining the project's profile and continuing to persuade residents to try and use non-car modes.
- 8.4.11 The PTP contact methodology is illustrated in Figure 6 on the following page:

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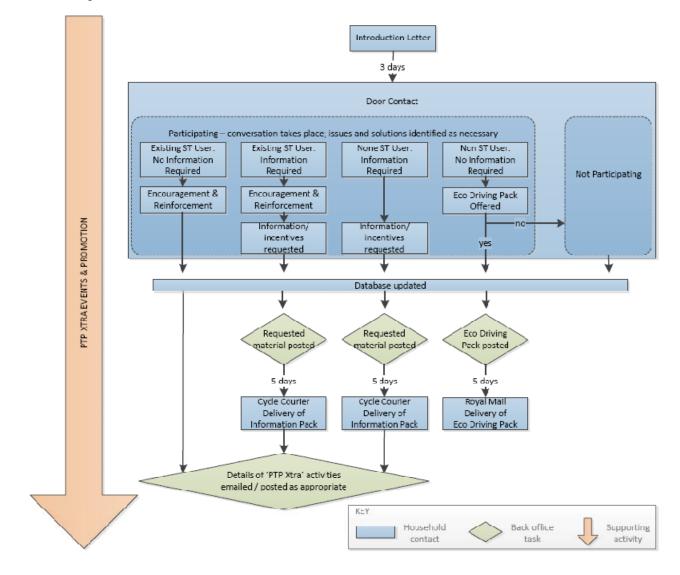


Figure 6: Recommended PTP Contact Process

Phasing

- 8.4.12 It is envisaged that the team will cover the three areas in a phased approach to ensure a concentrated focus on the different options available in each of the areas. It is proposed that approximately 500 households are targeted in an initial pilot study; this will most likely be in the Girton area, as discussed in Paragraph 8.4.2. The next three phase would then be implemented in Castle ward, Histon and Impington. The exact details of this phasing can be discussed with the County Council and will depend upon the local context at the time.
- 8.4.13 It is anticipated that each phase would be delivered in the spring/summer to make the most of the daylight hours. However there could be advantages of an autumn delivery, in that it would catch any new students moving into the area.

PTP Xtra

- 8.4.14 The additional AWTP measures will be branded as PTP Xtra. These measures will help to raise awareness of the benefits of sustainable travel to those not involved in the PTP project *per se* to encourage them to change their travel behaviour. Measures will include:
 - Working closely with relevant groups (Council Active Living teams, local health trusts, schools etc) to tie cycling in to external promotions of increasing physical activity
 - The website which will provide travel information and signpost to additional support and external campaigns, including health campaigns such as Fit4Life
 - Negotiation and promotion of discounts at local cycle shops
 - Publicising Cycle to Work Schemes
 - Offer of free cycle training (with the Council provider's, funded by the developer)
 - Cycle buddy scheme: existing cyclists recruited to help new cyclists try a rout.
 - Led leisure rides organised with local cycling groups
 - Working with local shops and the Council to identify locations where on-street cycle parking is required
 - Liaison with the local authorities over areas of concern regarding safety when walking, as raised through the travel surveys and by community groups
 - Potentially instigating a Reward Card scheme for shoppers who walk or cycle to their shops (which would then be led by local businesses rather than the developer). This idea is inspired by a similar scheme in Camberwell, London, called Step Inside Camberwell, details of which can be seen here: <u>http://step-inside-camberwell.co.uk/</u>
 - Promotion of CamShare
 - Promotion of car clubs, whether Zipcar or those run by social enterprises
- 8.4.15 The AWTP will also feature more general projects and events, such as promotion of Walk to Work Week, school travel campaigns at the local schools, and promotion of the Travel for Work Partnership's workplace travel planning initiatives.

8.5 Walking

Site infrastructure

- 8.5.1 The NIAB1 development itself has been designed with pedestrian safety and ease of movement as the highest priority. Segregated pedestrian facilities will be provided in all areas except the mews and courtyards, which will be shared surfaces for all users.
- 8.5.2 The site aspires to home zone principles in that the design will improve provision and safety for walking and cycling, slowing vehicle speeds and increasing interaction between road users. The streets will be sinuous ensuring short driver sight lines, and this layout, along with the green spaces and play areas throughout the site, will encourage drivers to pay attention to and encourage interaction with other users of the street. The speed limits are set at 20mph, but the

traffic calming and shared surface areas across the site will mean that in practice vehicle speeds are likely to be below 20mph.

8.5.3 There are to be numerous pedestrian (and cycling) accesses around the boundary of the site as shown in **Error! Reference source not found.**Figure 7. At the new signalised access junctions onto Huntingdon Road and Histon Road new high quality pedestrian and cyclist crossing facilities will be provided.

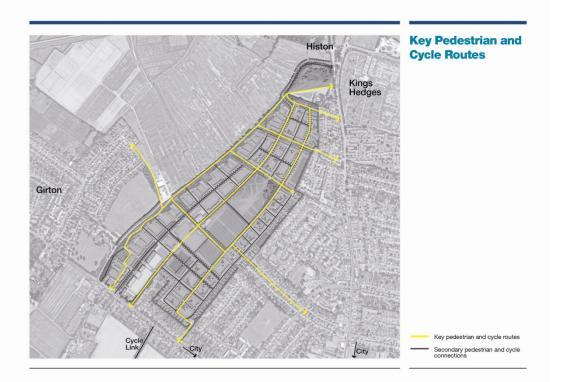


Figure 7: Access routes for pedestrians and cyclists

8.5.4 The existing public right of way running along the north-western boundary of the site will be retained for pedestrian use and improved by surface treatment and cutting back of vegetation where necessary.

Behavioural change initiatives

- 8.5.5 Supported by the general pro-walking and cycling environment, NIAB1 residents will also be encouraged to walk to and from their place of work and for leisure and retail trips through the travel information and marketing initiatives described above. This will also be promoted to those residents covered by the AWTP, using location-specific information on local facilities, routes and services to encourage residents to think about switching from taking the car out of habit to walking short journeys and using local services instead of those further afield.
- 8.5.6 The Travel Plan Coordinator will publicise and encourage participation in national Walk to Work Week and any local walking events. Residents will also be encouraged to get together to form walking groups or pair up as walking "buddies" to reduce fears over security, particularly in

winter months, and to enjoy the social benefits of walking together. These measures will also be closely tied in with the school travel plan campaigns to encourage walking to school (see Chapter 10).

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8.5.7 As the residents' trips will be originating from home, it is not felt that providing additional umbrellas or raincoats would be necessary; however the Travel Plan Coordinator will look to procure pedometers to distribute during walking campaigns. Umbrellas could be an incentive available through the PTP scheme; this will be decided when the PTP project is put in motion.

8.6 Cycling

Infrastructure

- 8.6.1 As described above, the NIAB1 site will be cycle-friendly through a street design which ensures low speed and a positive interaction between drivers and cyclists. In particular, cyclists will be routed (with signage and appropriate mapping) along the cul-de-sacs to the east of the site and also along Huntingdon Road for cycle trips to a variety of destinations towards the city centre and train station. Shared-use cycle lanes will be in place on the main Histon Road and Huntingdon Road accesses, linking to Histon Road. A new orbital cycle route linking Huntingdon Road and Histon Road will be provided in a green corridor parallel, alongside the improved public footpath along the north-west boundary of the site.
- 8.6.2 To improve the journeys of cyclists as they leave the site, the following off-site infrastructure improvements will be put in place as part of the development:
 - Cycleway to Thornton Way
 - New cycle crossings
 - Upgrading of the Brownlow Road cycleway
- 8.6.3 The exact location of the cycle parking provided on site is yet to be determined as the detailed design is not yet in place, but the developer is committed to providing cycle parking (covered where possible) across the site in secure and convenient locations to ensure that cycling is an easy to use mode of travel. The amount of cycle parking will meet the required Cambridge City Council standards (1 space per bedroom up to 3 bedroom dwellings, then 3 spaces for 4 bedroom dwellings, 4 spaces for 5 bedroom dwellings etc with some level of visitor cycle parking). There will also be cycle parking provided at the Community Centre, the primary school and the retail units. Some bicycle maintenance equipment will be available, either in the secure facilities or looked after by the Travel Plan Coordinator depending on the type of facilities provided (the type of cycle parking will be confirmed when detailed designs are submitted).

Behavioural change initiatives

- 8.6.4 The travel plan's cycling measures will build on the excellent initiatives already happening in Cambridge, promoting existing projects and adding to them.
- 8.6.5 The Travel Plan Coordinator will work with the City Council and local cycling groups to organise site-based cycle training sessions which will be offered to all new residents. A bicycle user group (BUG) will be set up, inviting existing and potential cyclists to come together to discuss

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cycling issues, organise group rides originating from the site and to work with the Travel Plan Coordinator to run campaigns to encourage other residents to take up cycling. Following SKM's community-based social marketing approach, the TPC will look to engage with engaging and dynamic cycling advocates, at a range of levels of ability, to help inspire and support all different types of people to start cycling. A "cycle buddy" scheme will be a key measure in the travel plan, using the skills and encouragement of confident cyclists to help new cyclists find safe routes across the city and gain the confidence to cycle by themselves on a regular basis. This will be extended to residents covered by the AWTP and promoted through campaigns and the PTP project.

- 8.6.6 It is intended that the development will have two bikes for residents to loan in order for them to try cycling to work and other destinations before having to purchase a bike. It is envisaged that this would be run by a professional bike shop rather than the Travel Plan Coordinator (who would be able to ensure the bikes provided are kept in good condition and would be able to provide more bikes if required) and discussions are underway to procure this service for the site.
- 8.6.7 The BUG and Travel Plan Coordinator will organise participation in local and national cycling campaigns, such as Bike Week in June. Equipment such as high-visibility and reflective clothing will be provided, either for sale, for rewarding participation or as prizes in association with these campaigns and throughout the year. Dr Bike sessions will also be organised as part of some of these events.

8.7 Public transport

Infrastructure

- 8.7.1 High quality bus services will be a key feature and selling point of the development. Every household will have access to the bus services within 400m of their home, and these services (as described in Section 2.5) provide connections to the train station via the city centre, and to destinations north and northwest of the site.
- 8.7.2 The proposed improvements to the local bus infrastructure are, in summary:
 - Provision of a new dedicated bus service connecting the development with the city centre every 15 minutes
 - Provision of bus stops within 400 metres (5 minute walk) of every dwelling at the development
 - Introduction of bus priority measures at the signalised access on Huntingdon Road
 - Identification of bus priority measures that could be introduced on Huntingdon Road
 - Allowance in the highway and masterplan design for a future orbital bus route across the site, as part of a route from the Madingley Road Park & Ride to via the Science Park, to the proposed Chesterton railway station, as identified in the CNWTS
- 8.7.3 New bus stops on the site will have shelters and up-to-date travel information, including realtime information at key stops such as outside the community centre (at a minimum). The bus

stops that are to be moved on Huntingdon Road and Histon Road will be upgraded when they are reinstated in their new location.

8.7.4 For rail travel, residents will be provided with information on how to cycle and take the bus to the train station for travel further afield. As cycle provision at the train station is already excellent and a priority of the station management and City Council, we will not seek to improve facilities there. However if there are any problems experienced by residents, the Travel Plan Coordinator will report them to the relevant authority.

Behaviour change initiatives

- 8.7.5 In order to stimulate habitual use of the bus services, promotion of the existing and new routes will be a priority for the travel plan. This will be in the form of the travel information described above, both at the time of sale and occupation, and also through the distribution of 'taster' bus tickets to residents and as an incentive to participants of the PTP project through the AWTP. A deal will be negotiated with Stagecoach in order to be able to offer discounted season tickets.
- 8.7.6 Services such as real-time bus information to mobile phones and the real-time information on the Cambridgeshire CC website will also be heavily promoted; these new innovations will help non-habitual bus users to see the improved convenience of bus travel.
- 8.8 Reducing single-occupancy vehicle (SOV) travel

Infrastructure

- 8.8.1 In addition to the measures already described to encourage walking, cycling and public transport, there will also be specific physical measures implemented at NIAB1 to actively discourage residents from travelling by car, especially alone. In particular, the layout of the site, with sinuous street, traffic calming and a bus gate has been designed to discourage high speeds and rat-running through the site.
- 8.8.2 Car parking will be provided at an average ratio of 1.5 spaces per unit across the site, in line with Cambridge City Council requirements. Some parking will be allocated to households, though this will depend on the tenant type. A number of car parking spaces will be reserved for car club vehicles, as discussed below. Off-site parking in this area was not seen as an issue during TA discussions so no CPZs in the area are proposed.
- 8.8.3 It is an aspiration of the development to ensure that car parking is not intrusive to the general look and feel of the site, or obstructive to walkers and cyclists; the eventual layout will be confirmed following detailed design.

Behaviour change initiatives

8.8.4 **Car club**: Discussions have already begun with Zipcar as to what level of car club provision will be appropriate for the development; Zipcar have provided a proposed Heads of Terms which are currently under negotiation in order to provide the most enticing offer for prospective members and to best meet the needs of both parties. Due to the proximity of two existing Zipcar vehicles to the site, it is believed that these existing cars can be used to establish initial membership amongst residents of NIAB1 and in the surrounding area. At present it is

anticipated that when the number of local members reaches 150 Zipcar will place a new vehicle on site. The first on-site car club vehicle will be in a visible and convenient location within the development and as the car club became established more vehicles would be added (spaces will be reserved for this purpose).

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- 8.8.5 A number of discounted memberships and a certain amount of free usage would be offered to residents; the exact amount is currently under negotiation with Zipcar. Bespoke marketing material will be developed by Zipcar to explain how the car club works, de-mystify the booking process and provide clear directions to where the cars are located. The Zipcar marketing team will visit the NIAB1 sales team to ensure they understand how it works and its benefits so that they can use the car club as a selling point. They will also, as part of the developer's package, hold a launch day, visiting the site with a car to demonstrate how it works. They will also run publicity events on site and in the local area in association with PTP Xtra.
- 8.8.6 The Travel Plan Coordinator will also aim to work with community-based car clubs, such as Hi-Car in Histon, or Commonwheels, to look to introduce more car club vehicles (not for profit) in the less central areas covered by the AWTP.
- 8.8.7 **Car sharing**: CamShare will be publicised in all travel plan promotional material. The Travel Plan Coordinator will hold a car sharing event at the Community Centre to promote the car sharing scheme and encourage interested residents to come along to meet other potential car sharers from the development and join up to the scheme, or start car sharing informally.

8.9 Reducing the need to travel

Infrastructure

- 8.9.1 The development has been designed with community living in mind there are playspaces and green spaces across the site to encourage onsite recreation and social exchange, as well as a sports ground and new pavilion for sports activities. The community centre will provide a focal point for the new community to meet and socialise, and will be used by the Travel Plan Coordinator for travel plan events. A new primary school will be built which will also help bring residents together and provide an opportunity for children to go to school on foot or by bike.
- 8.9.2 There will be retail facilities on site (the exact make-up to be determined) and there are other shops and services in walking and cycling distance of the site; on site and local facilities will be clearly marked, with journey times, in the Travel Information Pack.
- 8.9.3 There is a significant amount of employment opportunities within walking, cycling and easy bus journey from the site and as such it was not necessary to supply office space on site. These destinations will be clearly shown in travel information and the Travel Plan Coordinator will work with the Travel for Work team to help promote workplace travel plan initiatives to the relevant residents.
- 8.9.4 There will be a secure, sheltered storage facility at NIAB1 for home deliveries to be stored during the day. The Travel Plan Coordinator will promote this facility and also encourage neighbours to share deliveries where possible.

8.9.5 All houses at NIAB1 will also have broadband to enable the occupants to work from home and purchase goods such as groceries via internet shopping to reduce car trips.

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Behaviour change initiatives

- 8.9.6 The Travel Information Packs, PTP material and the Travel Plan Coordinator will promote the practice of online shopping. This will reduce the number of trips being made to and from the development and reduce the need for residents to own a car just for shopping trips.
- 8.9.7 The travel information will also promote teleworking and homeworking, emphasising the benefits for the individual as well as the environment in reducing the number of days a week spent commuting.
- 8.9.8 As an important part of their role, the Travel Plan Coordinator and PTP Travel Advisors will promote onsite and local services such as doctors, dentists, nurseries and supermarkets, helping residents to choose to use these local services rather than ones which may be located further afield.

8.10 Measures implementation table

8.10.1 The measures implementation table is shown overleaf, with measures denoted as being aimed at NIAB1 residents, the AWTP audience, or both. In the table, TPC is used as an abbreviation for the Travel Plan Coordinator.

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Measure	NIAB1	AWTP	Respons- ibility	Start	End	Notes
Travel Information						
Website	✓	✓	TPC	1 month prior to launch of PTP project	Ongoing	Will contain information on the TP initiatives and signpost to other sources of information
Information for marketing offices and show homes	√		TPC	6 months prior to initial occupation	At closure of marketing office	
Travel Information Packs	~		TPC	Prepared prior to occupation, delivered to residents at initial occupation	At full occupation	Information will also be available online
Tailored Travel Information		V	PTP Field Officer	Information prepared prior to PTP project	End of PTP engagement	Information distributed according to result of the PTP conversation
Walking						
Promotion of Walk to Work Week and any local walking events	✓	✓	TPC and PTP team	Initial occupation	End of TP monitoring period	At least 1 walking event per year
Encourage walking groups or pair up as walking "buddies"	✓ 	✓ 	TPC	At occupation of 100 th home (or critical mass for interest by residents)	End of TP monitoring period	
Cycling						
Cycle parking	✓		Barratt	Before occupation	End of construction phase	
Site-based cycle training sessions	~		TPC	At occupation of 100 th home (or critical mass for interest by residents)	End of TP monitoring period	To be offered periodically as warranted
Offer of voucher for		~	PTP Field	Start of PTP	End of PTP	If significant take-up, TPC
free cycle training			Officer	Λ±		will help organise sessions
Bicycle user group (BUG)	~		TPC	At occupation of 100 th home (or critical mass for interest by residents)	End of TP monitoring period	
"Cycle buddy" scheme	~	~	TPC	Once BUG established	End of TP monitoring period	

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	<i>.</i>					1
Have two bikes	✓		TPC, with	At 25%	End of TP	
available for			local bike	occupation	monitoring	
residents to loan			shop		period	
Participation in local	✓	✓	TPC and	From initial	End of TP	At least 1 cycling event per
and national cycling			PTP team	occupation	monitoring	year
campaigns					period	
Availability of high-	✓	~	TPC	From launch	End of TP	Could be an incentive for
visibility and				of PTP	monitoring	PTP participants
reflective clothing for				project	period	
sale or as prizes						
Public transport						
Offer taster and	✓		TPC and	On	At full	In Travel Information
discounted bus			Stagecoa	occupation	occupation	Packs and as part of PTP
tickets to residents			ch			incentive offer
Offer taster tickets to		~		From launch	End of PTP	
PTP participants interested in				of PTP	project	
switching to the bus				project		
<u> </u>						
Reducing SOV travel Discounted	✓		TPC and	On	At full	Under negotiation – likely
memberships and	v		Zipcar	occupation	occupation	to be a staged process,
annual usage offered			Zipcai	occupation	occupation	linked to provision of an
to residents						on-site car club vehicle
Publicity for local car	✓	✓	TPC and	At approx	Ongoing	Includes bespoke
club vehicles			Zipcar	25%	Chigoling	marketing material and
				occupation;		attendance at launch event
				with PTP		and other PTP Xtra events
				Xtra events		
Installation of a car	✓		TPC and	150	Ongoing, with	Demonstration car also
club vehicle			Zipcar	memberships	a view to	provided for marketing
				achieved	increasing to	purposes when requested
					up to 3	
					vehicles	
CamShare publicised	✓	✓	TPC	On	End of TP	Car sharing events to be
				occupation	monitoring	held, at least 1 every 2
					period	years
Reducing the need to	o travel					
Travel information	✓	~	TPC and	On	End of TP	In Travel Information
and PTP			PTP Field	occupation	monitoring	Packs, during relevant
conversation to			Officer		period	events and to PTP
include information on:						participants
- online shopping						
- teleworking						
- homeworking						
nomenening	ļ	ļ	!		<u> </u>	!

8.10.2 This implementation table will be updated as part of each Annual Monitoring Report.

9 Monitoring and review

9.1 Methodology

- 9.1.1 The monitoring and review of the travel plan and PTP project will be the responsibility of the Travel Plan Coordinator, who will work with an independent consultant to ensure results are reliable and consistent. The monitoring methodology will remain consistent throughout the life of the travel plan to ensure comparability of results over time.
- 9.1.2 The primary method for monitoring the travel plan will be household travel surveys. The household travel surveys will provide quantitative and qualitative data to allow progress towards the mode shift targets to be measured.
- 9.1.3 The surveys will be carried out on an annual basis, roughly at the same time of year each year. Surveys will be timed to ensure 'average' travel conditions, i.e. during term time in either the spring or autumn. Annual surveys will continue throughout the life of the travel plan, with less formal monitoring carrying on as the travel plan becomes voluntary.
- 9.1.4 The household travel surveys will be composed of a short household information form and travel questionnaires for individuals.
- 9.1.5 The household information form will collect supplementary information to help create a picture of the household that can help explain their travel choices and enable the targeting of travel information. This will include questions on household make-up, including number and age of residents, length of tenure, employment status, address of residents' workplaces, education status and school/college addresses, where applicable.
- 9.1.6 The travel aspect of the household travel surveys will gather information on the following:
 - Transport options, including number of vehicles owned by the household, number of driving licenses held, car club memberships and number of bicycles owned.
 - Travel awareness levels, including knowledge of the development travel plan/AWTP and acknowledged receipt of travel awareness materials.
 - Main mode of travel during the AM and PM peaks including destination/purpose, trip length and travel mode.
 - Similar information on leisure, education and retail trips (including time of day and frequency)
- 9.1.7 Qualitative feedback will also be gathered and considered on an informal basis from residents.

Additional data

9.1.8 Car and cycle parking usage will be monitored primarily on an informal basis within the development. All public cycle parking areas will be monitored during peak times to ensure they do not exceed 85% capacity. Peak demand for cycle parking at a residential development is likely to occur during the evenings, when residents have returned from work, school and leisure trips. If demand regularly exceeds capacity then more cycle parking will be provided.

9.1.9 The uptake of any vouchers or discounts will be tracked by the Travel Plan Coordinator, who will keep a count of the number of residents/households who have taken these up.

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9.2 Monitoring schedule

- 9.2.1 For the NIAB1 development, the initial travel survey will take place at 50% occupation, with further monitoring surveys taking place thereafter on an annual basis for 5 years or for 3 years after final occupation, whichever is the latter (presuming targets are met). At this time a final report will be submitted and the travel plan handed over to the residents.
- 9.2.2 PTP monitoring will occur 6 months after each phase of PTP, to gather evidence on the impact of the PTP on travel behaviour. A final evaluation report will be submitted one year after the final phase of PTP has been delivered and monitored.

9.3 Reporting

- 9.3.1 An Annual Monitoring Report will be submitted to Cambridgeshire County Council and Cambridge City Council. The report will detail the findings of the monitoring surveys (for the NIAB1 development and the PTP project, whilst it is running) as well as a description of the activities that have been undertaken in the past year, an assessment of the performance of the travel plan in reference to the objectives and targets and an action plan for how the travel plan will be taken forward over the next year.
- 9.3.2 The Annual Monitoring Report will be the responsibility of the Travel Plan Coordinator, with assistance from the PTP Field Officer.
- 9.3.3 The results of the more informal monitoring, such as any feedback received by the Travel Plan Coordinator over the year, uptake of any vouchers or discounts and BUG membership, will also be incorporated into the Annual Monitoring Reports.

9.4 Remedial measures

- 9.4.1 The Annual Monitoring Report will be vital in indicating that some remedial measures may need to be introduced at the site. Remedial measures will be triggered if the travel plan targets do not appear to be on track to be met within the prescribed timescales and the travel plan fails to progress towards meeting its targets between two consecutive monitoring surveys.
- 9.4.2 The process for putting remedial measures into action will be written in the S106 agreement which is currently in preparation. This will be closely linked to the achievements of the AWTP, which is to be introduced to mitigate against the impact of the development on the A14.
- 9.4.3 If the final travel plan target is not met, then the travel plan implementation, funded by the developer, will continue for a further 3 years or until the targets are met, whichever is earlier. The situation will be reassessed after 3 years and further remedial measures taken if necessary, funded by the developer.
- 9.4.4 The remedial measures required will depend upon which aspects of the travel plan are not performing as well as they should. For example, if progress is not being made towards the

overall SOV target and the cycle mode share is less than expected, it is likely that improved efforts will be made to encourage cycling, e.g. Barratts could fund and promote the free provision of a number of trial bikes through the cycle loan scheme.

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- 9.4.5 The remedial measures will be decided in discussion with the County and City Councils and the Highways Agency.
- 9.5 Sustaining the travel plan in the long-term
- 9.5.1 Both the NIAB1 travel plan and AWTP will be run in close cooperation with the County and City Councils and local sustainable travel groups and this will help sustain the travel plan in the long-term, once the developer is no longer involved.
- 9.5.2 Once the travel plan has been fully implemented, monitored for 5 years and reached its targets, responsibility for the travel plan will be handed over from the developer to the steering group.
- 9.5.3 Though the role will not continue to be as resource-intense, it is recommended that the role of Travel Plan Coordinator is retained and taken up by someone based on site, e.g. the site manager or a resident, to ensure the travel plan implementation occurs on a voluntary basis. As this person will not be employed specifically for this job, they will need the full support of the other steering group members. The BUG should also continue to be a source of support for cycling initiatives.
- 9.5.4 The Travel Plan Coordinator from SKM CB will train up this person to ensure they know what initiatives are available and what help they can obtain from organisations such as the Councils and the Cambridge Cycling Campaign.

10 School and workplace travel plans

10.1 Overview

- 10.1.1 At this stage it is not known exactly what form the retail aspect of the development will take and the school travel plan will need to be developed with the school management once it is set up. However, the developer is committed to ensuring travel plans are implemented for these land uses and that they will effectively reduce travel to and from the site. The following sections set out the proposed measures for the school travel plan and retail travel plans, to be enhanced and confirmed at a later stage.
- 10.1.2 The Travel Plan Coordinator/Champions in the school and retail units will need to work closely with the Travel Plan Coordinator and use the material produced for this travel plan as appropriate.
- 10.1.3 All travel plans related to this development will include the following:
 - Contact details of the Travel Plan Coordinator/Champion
 - An assessment of the existing travel situation
 - Objectives and SMART mode shift targets, which set out targets and indicators to enable the success of the travel plan to be judged
 - A list of site-specific measures to enable and encourage all users (including visitors) to use sustainable modes of travel
 - An action plan setting out how and when and by whom those measures will be implemented
 - A monitoring regime which will ensure progress towards the mode shift targets is measured and reported on, and allow action to be taken if the targets are not being met
 - Details on how the travel plan will be funded

10.2 School travel plan

- 10.2.1 The school travel plan will be run by a nominated member of staff at the school, with the full support of senior management. The school Travel Plan Coordinator will work closely with the County's school travel planning team
- 10.2.2 This list is by no means exhaustive, but the school travel plan measures are anticipated to include:
 - Walk to school promotions, including Walk to School Week in May and other projects available throughout the year
 - Integrating smarter travel into the curriculum, including geography (the local area, climate change, pollution, etc), citizenship, maths (analysing travel survey results) etc
 - Encouraging cycling through events such as Bike Week

- Organising cycle training
- Competitions to get children thinking about smarter travel
- Providing/selling reflective clothing and equipment
- Regular assemblies educating about the health, social and environmental benefits of walking, cycling as opposed to using the car
- 10.2.3 In line with national guidance, the travel plan will cover a period of three years, at which time it will be fully reviewed and re-written. The travel plan will be monitored annually, with a review of the initiatives undertaken and a new action plan set for the year ahead. A 'hands up' travel survey will also be undertaken each year to assess the mode shift that is occurring as a result of the travel plan.

10.3 Retail travel plans

- 10.3.1 Depending upon the size and nature of the retail units, the retail measures could include:
 - Clear and visible public transport information and information on walking and cycling routes and journey times, and promotion of the real-times services on mobile phones and the internet
 - Taxi phone numbers on display
 - Bike trailers for loan, trial and purchase (for a large scale store)
 - Cycle to work scheme offered to staff
 - Participation in local and national campaigns such as Bike Week
 - Dr Bike sessions (could be run with RTP events, e.g. at Community Centre and advertised at the retail units)
- 10.3.2 Each retail unit will need a nominated travel plan coordinator, but for very small units they are likely to take more of a 'Champion' role, and take their lead from the RTP Coordinator.

11 Summary

11.1 Summary

11.1.1 Funded by Barratts, this travel plan will be implemented to mitigate the impacts of the NIAB1 development on the local highway network. It will be implemented on the NIAB1 site and over an area covering approximately 3,900 households.

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- 11.1.2 The measures, which have been developed in consultation with key stakeholders including the County Council and Stagecoach, will include:
 - Personalised travel planning
 - Travel Information Packs
 - Bus incentives, including free weekly tickets and annual ticket discounts (to be confirmed)
 - Car sharing and car clubs
 - Cycling campaigns and incentives
 - Walking initiatives, including promotion of local shops and services
- 11.1.3 Mode shift targets have been set for both the NIAB1 development and the AWTP. Annual monitoring reports assessing the success of the travel plan will be submitted to the County Council and Highways Agency.
- 11.1.4 The AWTP is intended to be a blueprint for the development of further AWTPs which will be implemented by developers to mitigate against the traffic impacts of subsequent developments, such as the neighbouring NW Cambridge development. The measures and branding can be developed and extended to cover new areas in these future AWTPs.

<u> Appendix 1 – Policy review</u>

Planning Policy Guidance (PPG13) 13: Transport (2011)

PPG13 places emphasis on the need to locate new development within urban locations and town centres in order to reduce the need to travel.

The overall objectives of the guidance are to integrate planning and transport at the national, regional, strategic and local level to promote more sustainable transport choices and reduce the need to travel, especially by car. Paragraph 3 affirms the role of planning in influencing the patterns of new development in order to:

"..reduce the need to travel, reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and services by public transport, cycling and walking."

PPG13 considers that in order to deliver these objectives, local authorities should:-

- "...focus major generators of travel demand in city, town or district centres and near to major public transport interchanges,
- Accommodate housing principally within existing urban areas, with increased densities for both housing and other uses at locations which are highly accessible by public transport, walking and cycling,
- Give priority to people over ease of traffic movement and plan to provide more road space to pedestrians, cyclists and public transport in town centres, local neighbourhoods and other areas with a mixture of land uses"

PPG13 introduces maximum parking standards for different land uses. In addition, it emphasises the need for high levels of non-car mode accessibility to new developments, coupled with a requirement for transport assessments to estimate mode share to such sites. Both these messages are intended to aid local authorities to achieve their sustainable transport strategies.

PPG 13 makes specific reference to travel plans and identifies in paragraph 87 that the relevance of travel plans to planning:

"lies in the delivery of sustainable transport objectives including:

- Reductions in car usage (particularly single occupancy journeys) and increased use of public transport, cycling and walking; and
- Reduced traffic speeds, improved road safety and personal security particularly for pedestrians and cyclists".

Paragraph 88 states that "the Government considers that travel plans should be submitted alongside planning applications which are likely to have significant transport implications".

PPG 13 goes on to say, in paragraph 89, that travel plans should be:

"Worked up in consultation with the local authority and local transport providers. They should have measurable outputs, which might relate to targets in the local transport plan, and should set out the

arrangements for monitoring the progress of the plan, as well as the arrangements for enforcement, in the event that agreed objectives are not met".

This travel plan has been produced for the NIAB1 development with is an accessible location in he outskirts of Cambridge. The site has good bus links and is within walking and cycling distance of various services and within easy cycling distance of the city centre. In addition, the travel plan looks to tackle unnecessary car travel in the wider area through the implementation of an area-Wide Travel Plan (AWTP), the success of which will be robustly monitored.

Cambridgeshire Local Transport Plan 3 (LTP3)

The LTP3 covers the period from 2011-20116 and sets out the Council's strategy for transport in terms of the challenges to meet and how it will overcome those challenges. The NIAB1 development and travel plan abides by these policies and complements the Council's implementation plan to achieve its sustainable transport goals.

The LTP3 sets out five challenges, the most pertinent of which for this travel plan are highlighted below:

- Challenge 1: Improving the reliability of journey times by managing demand for road space, where appropriate and maximising capacity and efficiency of the existing network.
- Challenge 2: Reducing the length of the commute and the need to travel by private car.
- Challenge 3: Making sustainable modes of transport a viable and attractive alternative to the private car
- Challenge 4: Future-proofing our maintenance strategy and new transport infrastructure to cope with the effects of climate change.
- Challenge 5: Ensuring people especially those at risk of social exclusion can access the services they need within reasonable time, cost and effort.
- Challenge 6: Addressing the main causes of road accidents in Cambridgeshire.
- Challenge 7: Protecting and enhancing the natural environment by minimising the environmental impact of transport.
- Challenge 8: Influencing national and local decisions on land-use and transport planning that impact on routes through Cambridgeshire.

By encouraging and helping both new residents and the existing residents in the wider area to use more sustainable modes of travel and to utilise local services, the travel plan will help meet these challenges. The travel plan approach takes into account the various barriers and opportunities faced by residents in different localities, from encouraging NIAB1 and Castle ward residents to walk and cycle into the city, to increasing use of the Guided Busway in Histon, to enabling more car sharing in Impington and Girton where public transport is more limited.

In addition, one of the issues identified in the LTP3 is the high level of car use compared to walking and cycling, and the negative impact this has on health. Health is also impacted upon by poor air quality as a result of car use. The NIAB1 and AWTP will look to focus on increasing walking and cycling for shorter distance trips, as well as the promotion of local facilities to reduce reliance on the private car. The LTP3 follows the road user hierarchy set out in Manual for Streets 2, and this hierarchy has also been followed in the design of the development and the choosing of travel plan measures.

The LTP3 advocates the increased use of travel planning to help overcome the challenges the County faces, as well as encouraging employers to work with the Travel to Work Partnership which is something that will be promoted through the AWTP.

South Cambridgeshire Local Development Framework (LDF)

The LDF for South Cambridgeshire replaces the Local Plan (adopted in 2004) and comprises a number of Development Plan Documents (DPDs) that set out policies and proposals to which new development must adhere.

The Core Strategy

The Core Strategy, adopted in 2007, sets out the development strategy and objectives for future development in South Cambridgeshire.

Through its location and design, and the development of the travel plan, the NIAB1 development helps meet the following key objectives for the Core Strategy:

Objective ST/b: To locate development where access to day-to-day needs for employment, shopping, education, recreation, and other services is available by public transport, walking and cycling thus reducing the need to travel, particularly by private car.

Objective ST/c: To create new and distinctive sustainable communities on the edge of Cambridge connected to the rest of the city by high quality public transport and other non-motorised modes of transport which will enhance the special character of the city and its setting.

ST/f: To provide and enable provision of enhanced infrastructure to meet the needs of the expanded population.

Aside from the objectives above, the Core Strategy does not provide detail on the transport requirements for new development as these will be provided in emerging DPDs (including the Cambridge Area Transport Strategy which is in development), Area Action Plans and the Local Transport Plan.

NW Cambridge Area Action Plan, 2009

The area covered by this AAP does not cover the NIAB site, but as the location and features of the development areas are similar, it is useful to note that our travel plan conforms with the sustainable travel requirements (in terms of car mode share and travel plans) for the neighbouring development, as demonstrated by Policy NW11:

Policy NW11: Sustainable Travel

Development and transport systems will be planned in order to reduce the need to travel and maximise the use of sustainable transport modes to encourage people to move about by foot, cycle and bus, to achieve a modal share of no more than **40% of trips to work by car** (excluding car

passengers). This will include the **provision of car clubs, employee travel plans, residential travel planning**, and other similar measures.

Cambridge City Local Plan – Adopted

The Cambridge Local Plan was formally adopted in July 2006, and is to guide development up to 2016.

Chapter 8 of the Local Plan deals with the policy for connecting and servicing Cambridge, the objectives being listed as:

- To minimise the distances people need to travel, particularly by car.
- To maximise accessibility for everyone, particularly to jobs and essential services.
- To minimise adverse effects of transport on people and the environment.
- To ensure adequate provision of sustainable forms of infrastructure to support the demands of the City.
- To promote a safe and healthy environment, minimising the impacts of development upon the environment.

The design of the development adheres to the following requirements:

- Policy 8/4 on Walking and Cycling Accessibility: "To support walking and cycling, all development will be designed to:
 - o give priority for these modes over cars;
 - o ensure maximum convenience for these modes;
 - o be accessible to those with impaired mobility; and
 - o link with the surrounding walking and cycling network".
- Policy 8/5 on the Pedestrian and Cycle Network: "New developments will safeguard land along identified routes for the expansion of the walking and cycling network. In addition, funding for high quality physical provision of these routes will be required, both within and adjacent to the proposed development site. Any existing routes should be retained and improved wherever possible".
- Policy 8/6 on Cycle Parking: "Developments will provide cycle parking in accordance with the Parking Standards, in number, location and design. Planning applications must include full details of the proposed cycle parking".
- Policy 8/7 on Public Transport Accessibility: "All development within the urban extensions must be served by a high quality1 public transport service within a 400 metre walk. Developers will be required to ensure the provision of services from the first occupation of development for a period of up to five years".

The travel plan will help optimise all the above design features through the provision of information and regular promotion of the opportunities for and the benefits of choosing walking, cycling and public transport over the private car.

Appendix 2: PTP Technical Note

The Smarter Choice Consultancy





To: Jo Boyd-Wallis, SKM Colin Buchanan

CC: Mark Fitch, SKM Colin Buchanan

Author: Beth Hiblin Date: 4 December 2011 Project number: 201110-P Project name: NW Cambridge PTP

Research into Personalised Travel Planning and its application for NW Cambridge

1. INTRODUCTION

This technical note compiles research in to past Personalised Travel Planning (PTP) projects and uses this to assess the potential scope of an area-wide PTP project to be delivered in Barrett Eastern Counties' proposed NIAB1 development and neighbouring residential areas.

The research in to past PTP projects reviews:

- Potential impact
- Participation rates
- Cost per head
- Contact methods

This research is then applied to the proposed NIAB1 area-wide PTP project, with suggestions developed relating to:

- Cost
- Characteristics of the target areas
- Phasing
- Contact method
- PTP Xtra (complementary activities)
- Staffing
- Governance
- Expenditure and tasks
- Monitoring and evaluation



2. PTP RESEARCH

The most recent wide-scale analysis of PTP was undertaken by the Department for Transport (DfT) in 2007 and resulted in the publication of the *Making Personal Travel Planning Work* suite of documents (2007a, 2007b, 2007c, 2008). The cost-benefit analysis in these reports a projected £30:£1 return on investment in PTP projects, with a typical reduction in car driver trips of 11% in the target population.

It is difficult to compare the costs, participation rates and impacts of different PTP projects, due to differences in how these are calculated and/or recorded. However, these headline figures are broadly in line with estimates from other key research – the seminal Smarter Choices report of 2004 and the results of the Sustainable Travel Towns – the headline figures for which are summarised in Table 1.

Research	Estimated cost	Potential impact
Smarter Choices, Changing the Way We Travel (Cairns et al, 2004)	• £10-£70 per head	 7% - 15% mode shift reduction in car use predicted in urban areas
Making Personal Travel Planning Work (DfT, 2007a)	£20-£38 per targeted household	11% reduction in car driver trips (equating to a 4 percentage point decrease)
Sustainable Travel Towns Evaluation (Sloman et al, 2010 and Socialdata & Sustrans, 2009a, 2009b, 2009c)	 Approx. £16 per individual contacted Approx. £25-£29 per individual participating 	 6-18% relative reduction in car driver trips (11.7% average across all towns) 7-33% relative increase in sustainable mode trips (18.5% average across all towns)

2. POTENTIAL IMPACT

We have undertaken a review of 22 PTP projects for which we could find cost, participation and/or impact data, in order to understand better the potential of any PTP undertaken at NIAB1. These projects are summarised in Appendix A. Of these projects three were undertaken at new residential developments.

It is not possible to directly compare the impact of these projects due to differences in how they were monitored and because impacts are variously reported as either absolute mode shift reductions (i.e. percentage point decreases) or relative reductions (i.e. X% of the baseline figure).

However, all of the 20 projects with impact data report positive impacts related to one or more of the following:

- Reductions in car use, car as driver trips or single occupancy vehicle trips among the target population
- Increases in the use of sustainable modes of travel among the target population
- Increases in patronage on related bus routes
- Participants reporting they now travel more sustainably

Therefore the evidence base for PTP shows that reductions in car use and increases in sustainable travel use are highly likely to result from well-run PTP projects. The average reduction in car driver trips we should use to extrapolate for any PTP at NIAB1 should be 11% relative reduction / 4 percentage point mode shift (as per *Making Personal Travel Planning Work, which is generally*

accepted as the most robust analysis of PTP projects).

3. PARTICIPATION RATES

PTP projects target a population of households within a defined target area. It is highly unlikely that 100% of target households will participate in the project – due to practical difficulties with making contact with every household and the fact that some contacted households will simply choose not to participate. As such there are two generally accepted metrics for assessing participation in a PTP project:

- a. *Contact Rate*: Number / percentage of houses in the target area with whom contact is made and who are offered the opportunity to participate.
- b. *Participation Rate*: Number / percentage of households in the target area with whom contact is made and who proceed to receiving information / reward.

Our analysis of the case studies shows that contact and participation rates between PTP projects in established and new residential areas are significantly different, as shown in Table 2.

Type of Area	Average Contact Rate	Contact Rate Range	Average Participation Rate	Participation Rate Range
Established Residential *	72%	55%-87%	43%	23%-63%
New Residential **	86%	82%-89%	63%	61%-65%

 Table 2: PTP Contact and Participation Rates in Established and New Residential Areas

* Based on available data from 15 case studies.

** Based on available data from two case studies where PTP delivered by dedicated consultancy team (Bessacarr College Gardens and Cambridge Arbury Park) – as proposed in NIAB1. Adamstown data excluded as project delivered using a different delivery model (i.e. by in-house council team).

While contact rates between established and new residential areas are broadly similar, there is a 20% difference in participation rates. This is likely to be because established residents are already familiar with the local geography and are more likely to have established habitual travel patterns which they are less willing to change. The greater participation by new residents reflects established travel behaviour change theory – which proposes that new travel habits have not yet become established and that new residents are more open to considering new ways of travelling, particularly to local services. This is precisely why targeting PTP at new residents of NIAB1 is likely to have a significant impact on car kilometres generated by the development.

The supposition above is borne out by data from the PTP projects which have already taken place in NW Cambridge in recent years:

- Arbury Park: new development (2008)
- Kings Hedges: existing residential (2010)

Evaluation of these showed that a higher percentage of new development participants found their conversation with the PTP travel advisor useful than existing residential participants; 96% at Arbury Park compared to 83% in Kings Hedges. Although comparison of the outcomes of these PTP projects is difficult as their evaluation methods varied, the PTP project at Arbury Park was independently assessed as having been slightly more effective (Integrated Transport Planning, 2010).

For PTP occurring as part of the NIAB1 Area-wide Travel Plan contact rates and participation rates in line with Table 2 can therefore be applied to the established residential and new residential areas to be targeted. These projections are shown in Table 3.

Target Area	Target Households	Estimated Number Contacted	Estimated Number Participating
Established Residential			
Histon	1,160	835 (72%)	499 (43%)
Impington	950	684 (72%)	409 (43%)
Girton (outside A14)	432	311 (72%)	186 (43%)
Girton (inside A14)	276	199 (72%)	119 (43%)
Castle (south of NIAB1)	601	433 (72%)	258 (43%)
Subtotal	3,419	2,462 (72%)	1,470 (43%)
New Residential			
NIAB1	1,780	1,531 (86%)	1,121 (63%)
TOTAL	5,199	3,992	2,592

Table 3: Projected Contact and Participation Rates for NIAB1 Area-wide Travel Plan PTP

If all households in the NIAB1 Area-wide Travel Plan target area were offered PTP the total number of houses contacted is estimated to be 3,992 and the total number participating is estimated to be 2,592.

4. COST PER HEAD

Of the nine case studies we reviewed with reliable cost data, the average cost per *contacted* individual / household was £32 (with a range across all projects of £9 - £99) and average cost per *participating* individual / household was £49 (with a range of £14 - £112). Although again these are not directly comparable, these estimates are broadly in line with those from the established research shown in Table 1. The cost per head of each project has been plotted against number of households targeted in Figure 1:

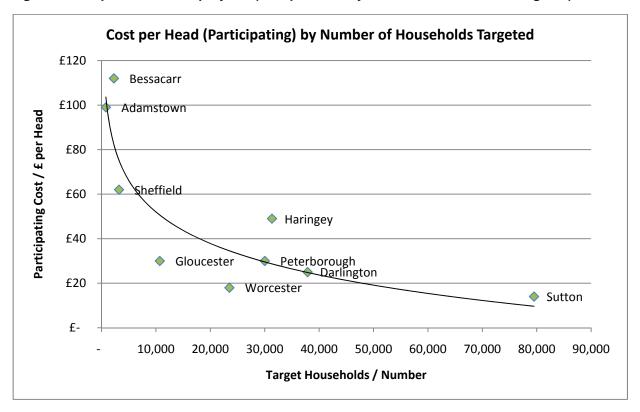


Figure 1: Comparison of PTP projects (cost per head by number of households targeted)

What is certainly clear is that the larger the scale of the project, the greater the economies of scale achieved and the cheaper the per head cost. For the three smaller scale PTP project case studies¹ (which had target populations under 5,000 and so are more relevant to the NIAB1 PTP proposal for a target area of circa. 5,000 households), the average cost per *contacted* individual / household was £65.33 (with a range from all projects of £28 - £99) and average cost per *participating* individual / household was £91 (with a range of £62 - £112).

Therefore for a relatively small scale scheme like that proposed for NIAB1 it would be appropriate to estimate a per head cost in the region of £65.33 per *contacted* individual / household or £91 per *participating* individual / household.

The resultant estimated costs for the NIAB1 PTP project are calculated in Section 6.

5. PTP CONTACT METHODS

The term 'Personalised Travel Planning' has historically be applied to a variety of approaches taken to provide travel information to individuals or households. These have included travel advisors making contact with the target audience by post, telephone or face-to-face conversation – or some combination of these.

Best practice in residential PTP typically involves travel advisors engaging householders in conversations about their travel habits and potential for changing these, with specific information and resources being offered to them in order to support the trying of new modes. Travel advisors typically make contact with householders either by telephone or 'door contact' (i.e. going door-to-door and having face-to-face conversations with householders who are at home).

¹ Adamstown, Bessacar (2006) and Sheffield

Making Personal Travel Planning Work: Practitioners Guide (DfT, 2008) summarises the advantages and disadvantages of the telephone and door contact methods, as shown in Table 4.

Contact Method	Advantages	Disadvantages
Telephone	 High response rates due to ability to undertake greater number of attempts Cheaper and quicker – more cost effective 	 Complete contact number details for target area households not available Available numbers disproportionately exclude certain groups (younger residents) Low (and declining) number of contactable households in some areas due to fewer landlines and no mobile telephone directories
Door-to-Door	All households potentially contactableVery visible community initiative	Expensive and time consumingPotential safety concerns for field staff
Combination	Maximises the value of telephone contact with thoroughness of door-to- door	More expensive than telephone only contact

Table 4: Advantages and Disadvantages of the Different Contact Methods Used in PTP Projects

Extracted from Table 2.4, Making Personal Travel Planning Work (DfT, 2008)

Clearly, telephone contact is considered cheaper and could result in higher contact rates due to the ability to undertake more contact attempts, although there is potential for some demographic groups to be excluded. However, the quality of engagement with door-to-door contact – in terms of more contacted households being converted in to participants and greater mode shift subsequently being achieved – makes this a much more effective contact method.

Sinclair Knight Merz's past experience of PTP delivery in the Gold Coast, Australia, where both telephone and face-to-face contact methods were utilised, shows the clear benefit of investing in door contact in order to maximise both contact rates and the conversion of households from 'contacted' to 'participating'. This is illustrated by these extracts from the Gold Coast TravelSmart project report (Sinclair Knight Merz, 2011):

"The inclusion of the face-to-face component, while more expensive than the phoning method led to significantly improved uptake of TravelSmart in the Gold Coast. Of the 18,784 households with a contract status of 'Engaged' 8,620 (46%) were contacted initially by phone and 10,164 (54%) were contacted initially face-to-face. This means that more than half of the households engaged would have been excluded from the program if only phoning (up to six times of weekdays and weekends) were used. This is a clear endorsement of the method for future programs."

"Face-to-face conversations not only more than doubled the number of households in an area that could be contacted, but showed a distinctly better 'success' rate in engaging households based on the number attempted (52 per cent for face-to-face compared with 27 per cent for phone)."

The relatively small scale of the NIAB1 area-wide PTP project, and the fact that it will already have to cater to two audiences (established and new residents), means that it would be not be cost effective to contact participants by more than one method. Socio-demographic profiling of the target area show that one ward is home to significant levels of student housing, where telephone landlines will be less common and therefore

making telephone contact will be difficult.

Therefore, despite the higher costs of door-to-door contact the potential for it to achieve higher contact and participation rates – and therefore potentially affect greater mode shift – makes it the prefered method for the NIAB1 area-wide project.

6. COSTS FOR NIAB1 AREA-WIDE PTP

Based on the average per head costs for PTP estimated for small scale projects (Section 4 above), and the number of households predicted to participate in the NIAB1 area-wide PTP project (Section 3 above), it is possible to calculate a projected costs for delivering PTP to all households in the target area, as shown in Table 5.

Target Area	Target Households	Estimated Cost by Contacted Households [£65.16 x no. of h'holds] (est. no. contacted)	Estimated Cost by Participating Households [£90.86 x no. of h'holds] (est. no. participating)
Established Residential	3,419	£160,403 (2,462)	£133,579 (1,470)
New Residential (NIAB1)	1,780	£99,746 (1,531)	£101,890 (1,121)
TOTAL	5,199	£260,150 (3,992)	£235,470 (2,592)

Table 5: Projected Costs for NIAB1 Area-wide PTP - All Households

As the figures for cost per contacted household and per participating household are based on averages from case studies, they do not result in the same *total cost* for both contacted households and participating households when applied to the projected household figures for the NIAB1 PTP project. However they do show that for the NIAB1 project a realistic cost for targeting 100% of household would be in the region of £235k - £260k.

The potential impacts of PTP (as shown in Section 1 above and in the case study data in Appendix A) are very high and extremely cost effective, especially compared to traditional transport infrastructure schemes, such as widening a stretch of highway to increase capacity. Therefore a cost in the region of £260k is relatively inexpensive for the NIAB1 area-wide PTP project – and is likely to be viewed as such by the relevant local authorities and Highways Agency.

However, should a more cost effective approach need to be taken, further analysis of socio-demographic data could (assuming PTP would still be offered to all NIAB1 new residents) identify the households within the wider target area who are *most likely* to take up PTP and trial sustainable modes. This analysis could be done utilising MOSAIC data related to each postcode, cross referencing this with the socio-demographic traits of the groups where (i) there is good potential for travel change which will result in larger scale carbon savings, or (ii) where 'good behaviour' should be rewarded to discourage a change to non-sustainable travel as circumstances change. These groups have been identified in the recently published Segmentation Model on Climate Change and Transport Choices (DfT, 2011) as:

- Educated Suburban Families (i)
- Affluent Empty Nesters (i)
- Less Affluent Urban Young Families (ii)

- Young Urbanites Without Cars (ii)
- Urban Low Income Without Cars (ii)

7. CHARACTERISTICS OF TARGET AREAS

The Colin Buchanan Technical Note *Area-wide Travel Plan Research* (2010) reviews the socio-demographic characteristics of residents of seven wards located in proximity to the NIAB1 site in NW Cambridge. It concludes that four of these have potential as target PTP areas – Castle, Girton, Histon & Impington and Milton. It was then decided to remove Milton as it would be most difficult to manage and is least relevant in terms of mitigating traffic from NIAB1 due to its location furthest away from the site.

The results of this analysis are shown in Table 6:

	Full-time students	Un- employed	Qualifi- cations	Car use	Distance travelled to work	Car owner- ship	Distance from NIAB1	Total	Rank for PTP suitability
Girton	3	1	3	3	3	2	4	19	1
Castle	1	4	1	7	4	4	1	22	2
Milton	7	2	4	1	1	1	7	23	3
Histon & Impington	5	3	5	2	2	3	5	25	4
West Chesterton	4	5	2	5	7	5	6	34	5
Arbury	2	7	6	6	5	7	2	35	6
Kings Hedges	6	6	7	4	6	6	3	38	7

Table 6: Analysis of suitability of local wards for PTP

Analysis of the socio-demographic and geographical characteristics of these three wards leads to specific conclusions **on timings, key modes and messages for PTP delivery in each area**, which are shown in Table 6. These conclusions should be taken in to account when detailed planning of PTP is undertaken.

The PTP approach will also advocate a pro-active, personal responsibility approach, through which participants are encouraged to consider their own travel issues and think about alternatives, e.g. avoiding the stress of being stuck in congestion on the A14 by travelling outside the peak hour, or by cycling instead.

Table 7: Target Ward Socio-Demographic & Geographical Characteristics and Consequences for PTP

	Castle	Girton	Histon & Impington
Overview	 Economic data shows that a high proportion of residents are likely to be students – so will be mainly travelling within Cambridge. As a consequence, education levels are higher than average – meaning residents might be more considerate of the environmental impact of their personal travel choices. Lower level of 2+ car ownership than other wards – probably due to students being less likely to own a car. This means that bus, cycling and walking will be key alternatives. However, to make best use of car stock in the area car sharing and car club promotion for some journeys could be appropriate. In the resident working population there is low car use for travel to work. However there is still significant scope for increasing walking, cycling or bus use by workers living under 2km, 2km-5km and under 10km from work respectively. Existing bus and cycle infrastructure is good – with Huntington Road and Histon Road both provide easy access to the city centre via frequent bus services and primary cycle routes (with some sections of on-road cycleway). Good health levels mean active travel will be possible for most residents. 	 The majority of residents are owner/occupiers of their own home and are economically active, but there is a significant proportion of retired and student residents too. Education levels are higher than average – meaning residents might be more considerate of the environmental impact of their personal travel choices. Good health levels mean active travel will be possible for most residents. Car ownership is high, with over a third of households having 2 or more cars – so there is scope to reduce use of these through car sharing or moving to alternative modes. A third of the resident working population drive to work – so influencing these could have high impact on the A14. There is significant scope for increasing walking, cycling or bus use by workers living under 2km, 2km-5km and under 10km from work respectively. Part of this ward is located north of the A14 and therefore is physically and psychologically 'cut off' from the urban core of Cambridge. However both the residential areas north and south of the A14 are linked to the centre by National Cycle Network Route 51. The southern area is well serviced by various bus services running along Huntingdon Road and the northern area is linked to the urban centre by three Citi 6 services per hour. 	 The majority of residents are owner/occupiers of their own home and are economically active. There is a significant proportion of social housing too and of those not currently working there are significant numbers of retirees and homemakers. Education levels are higher than average – meaning residents might be more considerate of the environmental impact of their personal travel choices. Good health levels mean active travel will be possible for most residents. Car ownership is high, with over a third of households having 2 or more cars – so there is scope to reduce use of these through car sharing or moving to alternative modes. 40% of the resident working population drive to work – so influencing these could have high impact on the A14. There is significant scope for increasing walking, cycling or bus use by workers living under 2km, 2km-5km and under 10km from work respectively. Although the residential area of this ward is located north of the A14 it is connected to urban centre by the Guided Busway, regular bus services and cycle links along Histon Road, as well as to the Cambridge Science Park by Guided Busway and National Cycle Network Route 51.

	Castle	Girton	Histon & Impington
Segmentation ²	 Likely to be home to a significant proportion of Young Urbanites Without Cars – who should be rewarded for their current sustainable travel habits and have their current travel habits reinforced – so it is more likely to remain as a life-long habit. 	 Likely to be home to a significant proportion of <i>Educated Suburban Families</i> – who are most likely to be open to the environmental benefits of sustainable travel but who have high travel needs, so where change is affected it is high impact. Mixed with (i) <i>Affluent Empty Nesters</i> – who could be influenced as they imbed new, postretirement travel habits and to buy lower carbon vehicles, and (ii) <i>Young Urbanites Without Cars</i> – whose sustainable travel habit should be rewarded and reinforced. 	 Likely to be home to a significant proportion of <i>Educated Suburban Families</i> – who are most likely to be open to the environmental benefits of sustainable travel but who have high travel needs, so where change is affected it is high impact. Mixed with (i) <i>Affluent Empty Nesters</i> – who could be influenced as they imbed new, postretirement travel habits and to buy lower carbon vehicles, and (ii) either <i>Urban Low Income Without Cars</i> or <i>Less Affluent Urban Young Families</i> – who will be most open to the cost savings and improved accessibility which result from use of sustainable travel.
Timing	 Target in Autumn, when Freshers are moving in to Cambridge and 2nd Year+ students are moving to new accommodation for the new academic year. Tie in to completion of Brownlow Road cycleway upgrade. Tie in to introduction of relevant public transport improvements. Tie in to introduction of Car Club vehicles. 	 For households south of A14 – tie in to completion of Thornton Way cycleway. For households south of A14 – tie in to introduction of relevant developer-funded public transport improvements. Tie in to introduction of Car Club vehicles. 	N/A
Mode Hierarchy	 Primary: Bus, Cycle Secondary: Walk, Car Share, Car Club Tertiary: Rail 	 Primary: Bus, Cycle Secondary: Walk, Rail, Car Share, Car Club Tertiary: Low Emission Car 	 Primary: Guided Bus, Bus, Cycle Secondary: Walk, Rail, Car Share, Car Club Tertiary: Low Emission Car

² The DfT's Climate Change and Transport Choice segmentation model (DfT, 2011) identifies nine population segments in to which public attitudes to climate change and transport can be categorised – and identifies those segments most appropriate for targeting with travel behaviour change initiatives. Page 10 of 27

	Castle	Girton	Histon & Impington
	 Low cost of sustainable travel Environmental benefits of sustainable travel 	 Low cost of sustainable travel (for retired / students) 	 Low cost of sustainable travel (for retired / social housing residents)
lges	 Rewarding current sustainable travel habits, as they are positive for the individual and local 	 Health benefits, including increased physical activity for children and reduced air pollution. 	 Health benefits, including increased physical activity for children and reduced air pollution.
Messa	community	 Environmental benefits of sustainable travel, especially for travel to work 	 Benefits to the community, making the village a more pleasant place to live
Key		 Rewarding current sustainable travel habits, as they are positive for the individual and local community (for students and others currently without cars) 	 Environmental benefits of sustainable travel, especially for travel to work

8. PHASING

Without more concrete information on the phasing of the NIAB1 development and when public transport / cycle / car club infrastructure will be introduced, it is not realistic to outline a schedule for PTP implementation between 2012 and 2020 (the eight years of the development's roll out). However, when more information is available and this schedule is developed the following should be borne in mind:

- 1) The Girton area north of the A14 would be ideal as the initial pilot phase, as it is relatively small, self-contained and does not need to be timed to link in with the roll out of bus, cycle car club infrastructure related to NIAB1.
- Areas which are co-located should be undertaken in sequence to increase the PR 'leakage' between areas and so that information resources relevant across areas are more likely to remain up-to-date.
- 3) Due consideration will need to be given to the number of target households, and predicated number of contacted and participating households in each phase (see Table 3).
- 4) As the largest areas Histon and Impington should either be divided in to four phases tackling approx. 500 houses each *or* be completed in two consecutive phases where staff resources are temporarily increased.
- 5) Delivery of PTP at NIAB1 and in the target areas of Girton (south of A14) and Castle needs to be timed to take in to account introduction of new public transport, cycle and car club infrastructure in/around the NIAB1 site.
- 6) Delivery of PTP in Castle should be in Autumn, to capitalise on the arrival of new student residents who have not yet settled in to established travel habits.
- Delivery of PTP to existing residential areas should be timed to avoid the years / seasons when occupations of new houses on NIAB1 will be most frequent – in order to ensure there is plenty of capacity to deliver PTP to new residents.
- 8) The season during which a phase will be implemented should be taken in to consideration. For example, as in Histon and Impington the Guided Bus will be a key mode, this phase(s) could be implemented in Autumn, leaving an area where cycling is more key to be delivered in Spring.
- 9) Relevant dates for public transport timetable updates should be confirmed (to prevent information becoming obsolete mid-phase).

It is recommended that SKM CB run a pilot in Girton (north A14) and then run three more intensive phases with increased staff resource in a) Histon b) Impington and c) Girton (south A14) and Castle – completing the PTP for existing residential areas in two years. This would:

- Reduce costs, as information would not need to be updated as many times, the field office and storage running costs would not run over such a long period, staff turnover would be limited, etc.
- b) Create a more intensive 'buzz' around PTP in the local area which would have a bigger impact and potentially result in greater mode shift.

Note: The above recommendations are based on PTP being delivered to *all households* in the target area. Clearly, should only a proportion of the households be included in the project then the phasing will need to take in to account the MOSAIC (or other) analysis data and the characteristics and geographical spread of the refined target audience.

9. CONTACT APPROACH

The recommended process for contact with target households is shown in Figure 2. This approach allows for participants to be streamed according to their existing travel habits and travel information needs – so there is a clear path for progressing participation with each stream. This process is based on the following assumptions and details:

- The same approach will be utilised for both existing residential households and newly occupied NIAB1 households – making the PTP project as cost effective as possible through streamlining and securing greater economies of scale. Small but significant 'extras' for new residents of NIAB1 should be put in place however, such as:
 - a) Offering the opportunity to book a travel advisor visit at the most convenient time.
 - b) Offering exclusive information or incentives, as relevant to the NIAB1 travel plan; such as access to loan bikes or trial bus tickets which are for a longer period than those offered to existing residents.
- 2) The face-to-face conversation with householders will be based on a *personal responsibility* approach, as advocated by Ampt & Engwicht (2007). Travel advisor training and their conversational 'script' will therefore need to be designed accordingly.

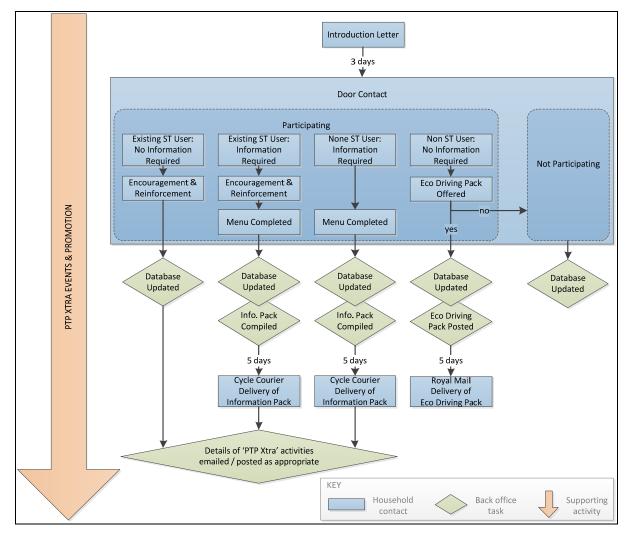


Figure 2: Recommended PTP Contact Process

- 3) It is best practice to focus the travel advisor conversation and information materials on how residents needs can be met as far as possible by local shops and services, which happen to be as accessible by sustainable modes as by car (or even more accessible). Therefore it is critical to include information on local shops and services in the information menu, and to work with local shops and services to secure discount opportunities for participating residents.
- 4) All households in the target areas will be targeted as it is known that only a proportion will be contactable and only a proportion of these will actively participate. By targeting all households those most open to participation and those most open to changing travel behaviour will be captured. If budget constraints mean that the number of target households needs to be limited, then MOSAIC profiling data (or similar) could be used to identify, within the target wards, the postcodes (and constituent households) which will be most open to change, based on the DfT's public perceptions segmentation (DfT, 2011).
- 5) The introduction letter should be sent to existing residents as their household is targeted in the relevant PTP phase. Three attempts should be made to contact each household – once during a weekday day, once during a weekend evening and once during a weekend day. If contact is still not made then a 'we missed you' card should be left, giving the householder an email address / telephone number to contact if they wish to participate and schedule a fourth visit.
- 6) Information on PTP and the offer of a personal visit will sent to new occupants of NIAB1 with their Travel Information Packs, within a week of first occupation. They should be given the opportunity to schedule their home visit. If they do not make contact to do this, door contact should be undertaken as above.
- 7) Within each phase sub-areas would need to be targeted sequentially, in order to ensure that timescales between actions (i.e. 3 days between introduction letter and door contact, 5 days between door contact and delivery of information) are maintained.
- 8) A mechanism for capturing contact details for *Existing ST User: No Info Required, Existing ST User: Info Required* and *None ST User: Info Required* will be needed in order to offer them the opportunity to participate in PTP Xtra events and activities. This might be offering them, as part of the face-to-face discussion, the opportunity to sign up to a local discount card or a mailing list.
- 9) Where possible, all letters and packs (both Royal Mail and cycle courier delivered) should be addressed to a named person.
- 10) The database update stage could be eliminated if travel advisors were issued with hand-held computers which enabled them to input contact stage data directly to the database and had an interactive information menu for the resident to select desired resources from.

10. PTP XTRA

To maximise the impact of the core PTP household contact process, it is recommended to complement this with a series of 'PTP Xtra' activities prior to, during, and in follow up to each PTP phase. These could be linked to the wider Area-wide Travel Plan. They should be focused on:

- a) Promoting the PTP project and positive case studies from participants; to encourage new participants and to remind past participants of their involvement and encourage them to act on the information / incentives they received; to also generate a 'buzz' about sustainable travel and opportunities within the community.
- b) Further **enabling participants** to access the equipment, skills and confidence they need in order to trial, and habitually use, sustainable travel modes.

Activities to promote the PTP project could include:

- a) Building a name and brand for the project which is consistently and appropriately used.
- b) Holding a sustainable travel fun-day (either as a standalone event or as part of an appropriate local event such as a village fete) as a celebration towards the end of a PTP phase. This might include:
 - i. Smoothie bike
 - ii. Second hand bike swap
 - iii. Free Dr Bike maintenance
 - iv. 'Guess How Many Houses Took Part' / 'How Many Steps to Walk to the Moon' competition with appropriate sustainable travel related prize
 - v. 'Pimp My Bike' competition
 - vi. 'Get to Know Your Local Bus and Driver' meet and greet
 - vii. Car share / car club stand with one-day-only discounts / free raffle entry for sign ups
- c) Issuing a press release and having a related photo opportunity at the start of each PTP stage.
- d) Other PR activity to secure positive stories in local media (primarily print and radio); especially in relation to other Area-wide Travel Plan measures being implemented, such as cycle parking installations at local shops, new car club vehicles being released and bus service improvements coming on-stream.
- e) Distributing additional information materials via local community outlets (e.g. schools, GP clinics, libraries, community centres, cafes).
- f) Ensuring Travel Advisors wear branded uniforms and are seen walking, cycling and travelling by bus locally.
- g) Delivering information packs in branded, reusable calico shopping bags, which become 'walking billboards' in the community.
- h) Running travel information stands at local events.
- i) Ensuring up-to-date local travel information is available on the NIAB1 development website.

Activities to further **encourage and enable participants** to trial sustainable modes could include:

- a) Securing discounts at a range of local shops and services for PTP participants when they have travelled to them sustainably (e.g. half price swim for those cycling to the pool, 2 for 1 on cinema tickets on production of a valid bus ticket).
- b) A cycle training session taking place in the phase area.
- c) A Dr Bike maintenance session taking place in the phase area.
- d) A travel training / bus and driver 'meet and greet' session taking place in the phase area.

- e) Creating a 'community noticeboard' on the development's website where residents can sell / swap bikes and get the contact details of 'Cycle Buddies' who will accompany them on a trial ride or of existing car club members / car sharers who can offer advice and reassurance from a user point of view.
- f) Negotiating discounts on season tickets for participants.
- g) Negotiating discounts at local cycle shops for participants.

11. STAFFING

Until the phasing of the PTP project is agreed it is not possible to develop detailed plans on the number of travel advisors and back office staff required at any one time. However, to deliver the style of PTP project described herein the delivery team would be made up of the following, as illustrated in Diagram 2:

- Project Manager (who will be the NIAB1 Travel Plan Coordinator)
- Back Office Team
- Field Office Manager
- Travel Advisor Team

The responsibilities attributed to each role for project delivery are shown in Table 7.



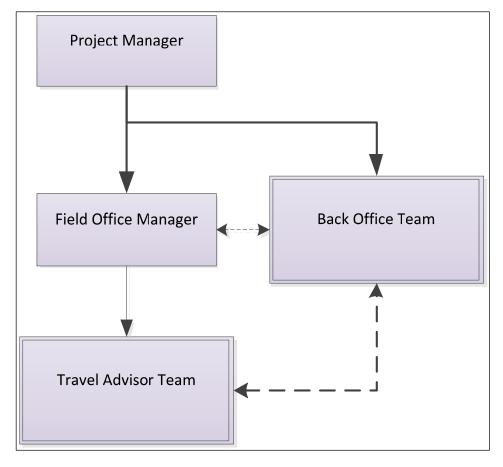


Table 8: PTP Team Roles & Responsibilities

Roles	Responsibilities
Project Manager	 Project management Integration with NIAB1 and Area-wide Travel Plans Steering Group management Monitoring and evaluation liaison Project branding Detailed design of contact strategy Design / procurement of information resources, incentives, etc. Negotiate delivery partner information and incentive contributions Field Officer Manager / Travel Advisor recruitment, training, equipment Field office rental and set-up PTP Xtra planning and (as appropriate) delivery Direct marketing to past participants Media relations
Field Office Manager	 Management of Travel Advisors Field office set-up and management Stock control (resources, incentives, etc.) Maintenance of Travel Advisor equipment PTP Xtra coordination and (as appropriate) delivery Note: Will be required to do shift work.
Travel Advisor Team	 Door contact Information pack collation Information pack delivery PTP Xtra delivery (as appropriate) Note: Will be required to do shift work. In 2007 the average salary for a travel advisor was £8 - £10 per hour (DfT 2008).
Back Office Team	 Database development and management Procurement of household data Operation of project email and telephone helpline Preparation of introduction letters Postage of introduction letters Collation of Eco Driver packs Postage of Eco Driver pack Post-door contact data entry

12. GOVERNANCE

Due to the nature of PTP projects it is not practical for Barrett Eastern Countries and SKM CB to implement a PTP project autonomously within NW Cambridge, without the close support of local agencies. It will be necessary for a Steering Group to be set up, encompassing all relevant partners and stakeholders, so that relevant organisations are informed of the scale and predicted impact of the PTP project, and are invited to support the PTP project, in particular with information resources, incentives and other delivery support. The responsibilities of the various stakeholders are detailed in Table 9:

Table 9: Suggested PTP Steering Group Representatives & Responsibilities

Organisation	Funding	Delivery	Strategy	Responsibilities
Barrett Eastern Counties	~	~		 Ultimately responsible for successful implementation Delivery of information through Marketing activities, as well as implementation of hard measures.
SKM Colin Buchanan		~	~	 Lead delivery organisation Setting PTP strategy and continued research into emerging best practice
Cambridge City Council	 (✓) project will use existing CCC projects 	4	~	 Integration with wider council sustainable travel initiatives Integration with planning requirements Information and incentives relating to council sustainable travel initiatives ATC monitoring data
Cambridgeshire County Council		~	~	 Integration with wider council sustainable travel initiatives Information and incentives relating to Camshare
South Cambridgeshire District Council		~	~	 Integration with wider council sustainable travel initiatives Information and incentives relating to council sustainable travel initiatives ATC monitoring data
Highways Agency			~	Key stakeholder regarding A14
Bus operators (on relevant routes only)	 (✓) provision of ticketing incentives 	~	~	 Information resources and incentives relating to bus / guided bus Bus and driver presence at relevant events Advisor on timetable and service updates Bus patronage monitoring data
National Express East Anglia (rail station operator)		~	~	 Information resources and incentives relating to rail Advisor on timetable and service updates Rail patronage monitoring data
Cambridge Cycling Campaign		~	~	Cycling advisorBike Buddy volunteers
Local cycle shops (e.g. Richardsons, Station Cycle Superstore, Chris' Bikes)		~	~	Information resources and incentives relating to cycling and presence at events
Streetcar		~	~	Information and incentives relating to car club and presence at relevant events
Local residents group			~	Local resident and community advisor and liaison

The Steering Group should meet regularly during the project design and set-up stage, and then more periodically thereafter, with email/written updates being issued by the Project Manager between meetings as necessary.

Naturally, the governance needs of the PTP project should be defined in conjunction with the wider needs of the NIAB1 and Area-wide Travel Plans – to ensure integration and reduce the burden on partner representatives.

13. EXPENDITURE & TASKS

In the context of the contact approach outlined in Section 9 for the NIAB1 area-wide PTP project, the per household cost for the project will need to cover the cost and staff time expenditures listed in Table 9.

	Cost / Task
Staff	 Project Manager Field Office Manager Back Office team Travel Advisor team
Marketing	 Project branding Media planning Launch event(s) On-going promotional activity and media relations Direct marketing to participant database
Information & Incentives	 Design intro. letter, menu, we missed you card, etc. Print intro. letter, menu, we missed you card, etc. Collate exiting information materials Re-print existing information materials (if necessary) Design new information materials Print new information materials Purchase rewards and promotional items Purchase information pack delivery bags or folders / envelopes Negotiate discounts, taster tickets, etc. Storage of information & incentives Reordering / reprinting of information & incentives as necessary
Travel Advisors & Door Contact	 Recruitment of Travel Advisors Training Uniforms & photo ID Hand held computers / clipboards and menus Cycle(s) and trailer(s) Maintenance of cycles and equipment Health & Safety procedures / equipment Door contact Information pack collation

Table 10: Expenditure and Staff Time Related to PTP Delivery

	Information pack delivery					
	PTP Xtra delivery					
<u>e</u>	Recruitment of Field Office Manager					
offlic	 Office set-up (rent, services, furniture, insurance, etc.) 					
Field Office	Office management and maintenance					
Fiel	 Stock control of information & incentives 					
	PTP Xtra coordination					
	Develop database					
	Purchase household data					
	On-going database management					
ice	Introduction letter collationIntroduction letter postage					
Back Office						
ck	 Set-up project freephone number and email address 					
Ba	Manage project freephone number and email address					
	Eco driving pack collation					
	Eco driving pack postage					
	Data input					
	Set-up and facilitation of Steering Group					
ent	MOSAIC analysis of target households					
Project anagement	Detailed design of contact strategy					
Pro	PTP Xtra planning					
Mai	Liaison with wider evaluation and monitoring strategy					
	Liaison with NIAB1 and Area-wide Travel Plans					

Note: No recruitment for back office staff is included, as these would be existing SKM CB staff.

14. MONITORING & EVALUATION

Independent evaluation of the NIAB1 area-wide PTP project would be required to ensure the results are uncompromised and robust.

Where possible, baseline data and post-intervention monitoring data should be collected for the target area and a control area. The purpose of the control area is to identify any background mode shift trends, so that the impact of the PTP project can be disaggregated from these.

Both (i) process performance and (ii) outcomes should be monitored and analysed as part of the evaluation process. Table 11 lists some of the relevant metrics for each of these.

Table 11: PTP Monitoring and Evaluation Metrics

Process Performance	Outcomes
No. of contacted households	Mode split
No. of participating households	Distance travelled
No. of items delivered	Car KM travelled
No. of rewards issued	Bus patronage
Average delivery timescales	Local congestion data
	Traffic / cycle count data
	Satisfaction with bus services / bus information BVPI data

The *Making Personal Travel Planning Work: Practitioner's Guide* (DfT, 2008) recommends that as a minimum the following be undertaken to evaluate a PTP project:

- a) Database analysis of process performance
- b) Analysis of secondary travel data (e.g. ATC and/or bus patronage data)
- c) Qualitative customer feedback survey

Ideally evaluation should also include analysis of qualitative travel behaviour change data, such as from a household travel survey.

POSTSCRIPT

It would be possible, were the budget available and if it supported Barratt Eastern Counties wider sustainable community intentions for the site, to expand the PTP approach to include other sustainable living themes – such as energy and water efficiency, waste prevention, eco-purchasing and use of local green spaces. This approach was successfully implemented by SKM's *LivingSmart* project in Australia and the *Seeding Sustainable Communities* project which was delivered by PECT in Peterborough's Hampton and Riverside developments between 2005 and 2008 (PECT, 2008 and NSMC, unknown date).

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PECT (2008) Seeding Sustainable Communities: Three Years of Inspiring Change – Final Evaluation Report for Defra

Sinclair Knight Merz (2011) Travelsmart Communities Project – Gold Coast: Final Report (Draft)

APPENDIX A REFERENCES

Data was compiled from the following sources in to the PTP project comparison in Appendix A:

Cairns S, Sloman L, Newson C, Anable J, Kirkbride A & Goodwin P (2004) Smarter Choices: Changing The Way We Travel (Chapter 5)

Department for Transport (2005) Personalised Travel Planning: Evaluation of 14 Pilots Part Funded by DfT

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Socialdata / Sustrans (2007) TravelSmart in Doncaster: Final Report on the Individualised Travel Marketing Campaign in Bessacarr, 2006

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Socialdata & Sustrans (2009a) Darlington – Sustainable Travel Demonstration Town: Travel Behaviour Research, Final Evaluation Report

Socialdata & Sustrans (2009b) Peterborough – Sustainable Travel Demonstration Town: Travel Behaviour Research, Final Evaluation Report

Socialdata & Sustrans (2009c) Worcester – Sustainable Travel Demonstration Town: Travel Behaviour Research, Final Evaluation Report

South Dublin County Council (2010) Smarter Travel Adamstown: Personalised Travel Planning Pilot Project

Transport for London / London Borough of Sutton (2010) Smarter Travel Sutton: Third Annual Report 2010

Transport for London / London Borough of Sutton (date unknown) Smarter Travel Sutton Case Studies: Personal Travel Advice

Appendix A: Personalised Travel Planning Case Studies

PTP Scheme	Description	Targeted At:	Cost	Target Audience	Contact Rate	Participation Rate	Impact
Bristol: Bishopsworth, Hartcliffe, Bishopston, Southville (2002-2005)	TravelSmart project	Existing residential	No data	7,181	5,649 (77%)	3,977 (55%)	 9 – 12% reduction in car driver trips 8-13% reduction in car distance travelled
Lancashire (2006)	TravelSmart project	Existing residential	No data	19,213	16,754 (87%)	12,172 (63%)	13% reduction in car driver trips
Nottingham: Lady Bay & Meadows (2003)	TravelSmart project	Existing residential	 £104,000 £201 per target contacted £288 per target participating 	891	517 (58%)	360 (40%)	 10-12% reduction in car driver trips 10-12% reduction in car distance travelled
Bristol: Easton, Clifton & Cotham (2006)	Door contact	Existing residential	No data	9,098	5,029 (55%)	3,205 (35%)	No data
London Kingston (2006)	Door contact with information pack sent by post	Existing residential	No data	22,299	15,386 (69%)	7,503 (34%)	12% reduction in car mode share to sustainable modes
London Haringey (2006)	Door contact with information pack sent by post	Existing residential	 £517,995 £27 per target contacted £49 per target participating 	31,324	19,122 (61%)	10,722 (34%)	No data
London Sutton (2006-2007)	Door contact with information pack personally delivered	Existing residential	 £500,000 £9 per target contacted £14 per target participating 	79,500	52,994 approx. (67%)	36,570 (46%)	 6 percentage point reduction in mode share for car drive / passenger between 2005/6 and 2009 [Note: this is the impact of the whole Smarter Travel Sutton programme]

PTP Scheme	Description	Targeted At:	Cost	Target Audience	Contact Rate	Participation Rate	Impact
Nottingham CC Pilot (2006)	In-house council project – selected households on the bus route sent a top specific timetable and smartcard loaded with a free day of travel	Existing residential	 £3.75 per pass issued £47 per passenger trip generated 	2,130	2,130 (100%)	No data	 After six months, patronage had grown by 5.5% on a year-on-year basis Ticket revenue increased by 5%, (excluding the subsequently reimbursed free days of travel used)
Brighton (2006-2008)	In-house council project with initial support from consultancy – door contact	Existing residential	 £25,000 (for all Cycle Demo. Town information activities) Plus at least 2.5 FTE staff 	30,000	No data	No data	 3.6-4.5% percentage point reduction in car driver trips³
Peterborough (2005-2007)	TravelSmart project – targeting approx. 50% of city households	Existing residential	 £937,000 £16 per target contacted £30 per target participating 	30,006	24,333 (81%)	13,465 (45%)	 9-13% relative reduction in car driver trips 13-21% relative increase in sustainable mode trips
Darlington (2005-2007)	Consultant delivered – initially telephone contact but Telephone Preference Service opt outs made this ineffective so moved to door contact – with information pack delivered by cycle courier – targeting 100% of households	Existing residential	 £1,010,000 £17 per target contacted £25 per target participating 	37,877	26,031 (69%)	17,184 (45%)	 11-18% relative reduction in car driver trips 7-33% relative increase in sustainable mode trips
Worcester (2005-2007)	TravelSmart project – targeting approx. 60% of households	Existing residential	 £433,000 £9 per target contacted £18 per target participating 	23,504	19,281 (82%)	10,278 (44%)	 6-13% relative reduction in car driver trips 6-31% relative increase in sustainable mode trips

³ Data from Areas 1 and 2 only. No data available for Area 3. From internal Brighton & Hove City Council PTP Area 1 and PTP Area 2 Comparisons.

PTP Scheme	Description	Targeted At:	Cost	Target Audience	Contact Rate	Participation Rate	Impact
Cramlington (2003-2004)	TravelSmart project	Existing residential	No data	2,045	No data	855 (42%)	 6% percentage point reduction in car as driver mode share
Gloucester: Quedgeley (2002)	TravelSmart project	Existing residential	 £160,306 £15 per target contacted £30 per target participating 	10,700	No data	5,280 (49%)	 5% percentage point reduction in car as driver mode share
Sheffield (2003-2004)	TravelSmart project	Existing residential	 £91,121 £28 per target contacted £62 per target participating 	3,210	No data	1,461 (46%)	 5% percentage point reduction in car as driver mode share
York (2003)	Trialled two approaches – Year 1 = telephone contact followed by face-to-face – Year 2 = post followed by telephone call much higher <i>contact rate</i> where telephone / face-to-face contact was made – but similar <i>participation rates</i>	New development and existing residential	 Pilot – costs not comparable due to amount of development & evaluation time involved 	5,701 individuals Year 1: 2,101 Year 2: 3,000	1,707 (30%) Year 1: 1,664 (79%) Year 2: 294 (10%)	242 (4%) Year 1: 105 (4.9%) Year 2: 151 (5%)	 20% percentage point reduction in car as driver / car as passenger mode share 16 percentage point reduction in car trips The change over the same time period in the non- intervention group was a 5 per cent increase in car trips
Queensland: Gold Coast (2009-2010)	Delivered by SKM for Queensland Government – used phone and door contact	Existing residential	No data	72,000	19,009 (26%)	17,430 (24%)	 Full independent evaluation pending 36% households reported being able to reduce the kilometres driven or increased walking or cycling or started to think before they travelled Compared to only 19% who reported that they had made no changes

PTP Scheme	Description	Targeted At:	Cost	Target Audience	Contact Rate	Participation Rate	Impact
Doncaster: Bessacarr (2006)	TravelSmart project – funded by Ben Bailey Homes and Miller Homes - first UK ITM programme funded by developer contributions – an area-wide scheme related to a new development – contact either by Initial letter followed by telephone call or door contact	Existing residential	 £127,000 £69 per target contacted £112 per target participating 	2,275	1,842 (81%)	1,134 (50%)	 Relative reduction in car trips of 13% Relative reduction in car distances travelled for day- to-day trips of 11%
Doncaster: Bessacarr College Gardens (2005-2007)	TravelSmart project – delivered on a rolling basis at new build homes – linked to above - first time TravelSmart applied to a new housing development and funded by developer	New development	No data	226	186 (82%)	137 (61%)	 Residents reporting regular (daily or several times a week) use of the car fell from 82% to 64%⁴ Occasional bus used doubled (24% to 47%) Cycling increased by 2 percentage points Walking increased by 12 percentage points
Cambridge: Arbury Park (2008)	Door contact followed by personal delivery of info. pack	New development	No data	308	274 (89%)	200 (65%)	35% reported reducing the number of SOV car trips they make
Cambridge: Kings Hedges (2010)	Door contact followed by personal delivery of info. pack	Existing residential	No data	433	325 (75%)	100 (23%)	35% of people think that the project has increased their sustainable travel
Dublin: Adamstown (2009 – 2010)	Delivered by South Dublin County Council – door contact	New development	 24,500 Euro (approx. £21,000) £99 per target contacted £99 per target participating 	800	213 households (26%)	213 households (26%)	59% of respondents reported increased use of sustainable modes

⁴ Evaluation was only a basic telephone survey with small sample so results cannot be compared directly with the wider Bessacar (2006) results. Page 27 of 27