

Review of the Orchard Park Development and Lessons to be Learnt for Future Major Developments

1. Introduction

- 1.1 A motion was passed at the Council meeting in September 2008 that the Executive Councillor for Climate Change and Growth should bring a report to Environment Scrutiny with regards to the review that South Cambridgeshire District Council (SCDC) has carried out of the Arbury Park (renamed Orchard Park) development. The findings of SCDC's Scrutiny Review are particularly important given Orchard Park's location at the edge of Cambridge, its potential transfer to Cambridge City Council due to the proposed boundary change, and the opportunity it holds for learning lessons for other major developments.
- 1.2 An initial report was taken to Environment Scrutiny Committee on 13th January 2009. At this meeting it was decided that the second more detailed report should avoid a box ticking exercise of areas of work already completed by SCDC's Scrutiny Review, and to focus primarily on transport issues that weren't covered in any detail in the Scrutiny Review.

Development of the Report

- 1.3 This is the second more detailed City Council report relating to Orchard Park. The purpose of this report is to use Orchard Park as a case study to improve future work. A number of interviews have taken place to inform the report (these are detailed in Appendix 1) and a lot of information has been collected. The original Council Motion asked for an evaluation of the development against the 'Cambridgeshire Quality Charter for Growth'. The Quality Charter was produced as a collaboration between Cambridge City Council, SCDC, Cambridgeshire County Council, Cambridgeshire Horizons, Inspire East and the Cambridge Housing Society. It sets out core principles of the level of quality to be expected in new developments in the Cambridge sub-region. It was decided that it would be useful to organise this report around the 4 'Cs' of the Quality Charter, Community, Connectivity, Climate and Character, in order to aid this review. Following the steer from the January Environment Scrutiny Committee, the main focus of the report is Connectivity, although it was felt useful to include other issues that have arisen as a result of the information collection exercise. In particular there are several issues around the implementation of the development and in relation to community facilities.
- 1.4 In line with the Council motion this report highlights issues that will need to be addressed before transfer of Orchard Park to the City Council. It also identifies lessons to be learnt for future major developments in and at the fringes of Cambridge.

Background to Orchard Park

- 1.5 Orchard Park falls within SCDC, although geographically it is at the edge of Cambridge and bounded to the north by the A14, which would be a more natural edge to the City. It has therefore been proposed to be included within the City under the current boundary change proposals.
- 1.6 A map of the site is included at Appendix 2. The site is bounded on all sides by large roads, the A14 to the north, King's Hedges Road to the south and Cambridge Road to the west. The Cambridgeshire Guided Busway is currently being constructed along the southern edge of the site, which will further affect movement from the site south into the City.
- 1.7 Outline planning permission for the development was granted in June 2005 by SCDC, subject to a large number of conditions and a Section 106 agreement setting out developer contributions. The permitted development includes 900 dwellings, up to 18,000 sq m of B1 (business) gross floorspace, education facilities, open space, local centre facilities, a public transport infrastructure corridor and mixed uses in five areas. Condition 1 of the outline permission requires conformity with the approved Development Framework Plan. The S106 agreement required production of a Design Guide. This was formally adopted in 2008.
- 1.8 There are three main landowners at the site: Gallagher Estates and Land Improvement Holdings, Unex and Cambridge City Council. A collaboration agreement was made between the owners to ensure that the S106 contributions were split fairly. Gallagher are the master developer and are therefore responsible for providing all the infrastructure on the site. The land was split into parcels (as can be seen labelled by letters and numbers on the plan in Appendix 2) and these were sold to housebuilders, and Registered Social Landlords (RSLs) to develop affordable housing. The housebuilders include Persimmon Homes, Taylor Wimpey (including Taylor Wimpey South Midlands, Taylor Wimpey East Anglia and Laing Homes), and Martin Grant Homes, and the RSLs are Bedfordshire Pilgrims Housing Association (BPHA), Places 4 People, and the Papworth Trust who build housing for people with disabilities. A third of the housing (300 units) is affordable housing.
- 1.9 Most of the land parcels have reserved matters approval. 473 of the 900 homes were occupied at 22nd April 2009. All of the affordable housing is built and occupied.

2. Connectivity

- 2.1 This section deals with the issues surrounding transport and looks at the different modes in turn. It looks at the barriers to movement from the site and the general connectivity with Cambridge to the south. This section was developed following discussions with County Council highway officers, Cycling and Walking Development and Promotion Officers at the City Council and members of the Cambridge Cycling Campaign. This section also refers to the noise and air quality issues at Orchard Park associated with the close proximity of the A14.

Barriers to Movement

- 2.2 At an early stage in the development process it was recognised that the busy King's Hedges Road would act as a barrier between the Orchard Park development and the built up area of Cambridge to the south. Discussions looking at how best to alleviate this problem included relocating King's Hedges Road through the development, but County Council highways officers felt that this was impractical and not a viable option.
- 2.3 The A14 also works as a barrier to the north. S106 money was provided for improvements to rural interchanges and also an cyclist/pedestrian overbridge of the A14. The S106 contribution towards the overbridge is a very small proportion of the total cost of such a scheme if it were to be progressed (also see cycling section below). Further work has been commissioned to look at possible improvements for cyclist and pedestrians at the A14 Histon junction.

Car

- 2.4 Car parking spaces were limited at Orchard Park in order to help encourage people to use more sustainable modes of transport, such as cycling, walking and public transport. However, there is currently no power for the local authority to enforce on-street parking measures as the roads are not yet adopted, and therefore people are parking on the roads and pavements. This has led to roads being cluttered and blocked, causing subsequent issues for bus access, and also for cyclists and pedestrians. This issue should be resolved once the roads are adopted, however this seems to be a long process.
- 2.5 Since Orchard Park was approved, the County Council together with District Councils have produced the 'Cambridgeshire Design Guide'. This gives clearer guidance on the design of the public realm within new developments; car parking guidance is provided and should be referenced for future development. On street parking is advocated in many instances, including within a key nationally used guide called 'Car parking: What Works Where' by English Partnerships (now the Homes and Communities Agency). The key to this approach, as

opposed to rear courtyard or 'mews' parking, is the adoption of parking within the public highway. This is essential to ensuring parking is designed in the public highway from the very start of the masterplanning process.

- 2.6 The car parking available for residents is mostly located at the rear of the properties. Planning officers now feel that parking should be located at the front of properties on new developments, as this gives safety and crime reduction benefits due to the increased visibility. From discussions it was felt that car ownership on site is high as a lot of people who live here do so because it is conveniently located for use of the A14, which is a large commuter route. This would cast doubt over how sustainable the community is. The provision of car parking spaces at Orchard Park, both on and off street has meant that the car club (StreetCar) was not interested in putting a car on site.
- 2.7 The roads on the site have been deliberately designed to be 'tortuous' to drive around. Access and egress to the site is not straight forward, and this is again a measure to discourage personal car use in favour of more sustainable modes of travel. County Council highways officers are pleased overall with the road designs, which will help with adherence to the 20mph design speed. However, Chariot Way is perceived to be one area of poor design. This is a short stretch of dual carriageway forming the main entrance / exit to the site which then reduces to one lane through the Circus. It is a very wide road and the highways officer believes that the two lane exit was unnecessary, but it was probably designed like this to be symmetrical. The junctions with King's Hedges Road are overcomplicated due to the guided bus. These types of junctions with the guided bus will also be necessary elsewhere in the City at Trumpington Meadows.

Lessons to be learnt

- 1. There need to be early discussions with car clubs in order to create a development where these would be viable. This may involve further limiting the amount of car parking.
- 2. Ensure the adoption of any on-street car parking is agreed to by the County Council and is designed into the masterplan at the very start of the design process.
- 3. Follow best practice guidance nationally in the provision of car parking, such as that contained in "Car parking: What Works Where" by English Partnerships and the 'Cambridgeshire Design Guide'.
- 4. Work with the County Council to try to get roads adopted as soon as possible. A strong phasing plan, and possible planning conditions, should help with this.
- 5. Do not over provide for motorised traffic with multi-lane junctions at accesses into residential developments.

Bus

- 2.8 In order to ensure the long-term sustainability of the site, Orchard Park was planned to have good public transport, walking and cycling accessibility. The bus link from the site into the centre of Cambridge is the Citi4 service, run by Stagecoach. The bus was planned to stop in the Orchard Park site itself, as well as continuing to stop along King's Hedges Road, which was part of its original route. However there were some initial problems in getting the bus onto the site to serve the first residents that moved into Orchard Park due to the knock on effects from the phasing issues, which meant that much of the site was still under construction. In addition, the County Council had not adopted the roads, and thus there were liability concerns for the bus company in running the Citi4 through the site and for the developers who own the roads.
- 2.9 The bus operating company and the developer eventually came to an agreement to allow buses to run in Orchard Park, but the construction issues meant that the buses could not move freely around the site, or have any space to stop for residents. Furthermore, on-street car parking has meant the roads within the site have, on occasions, been blocked and thus become too narrow for the buses to pass through them. This has led to a worsening of the problems with bus access to, and within the site, harming the overall efficiency of the service. Some residents have also found that the buses would not enter and stop on the site, even after the appropriate provision was made to accommodate the buses, as drivers were unsure of whether they were permitted to drive there. Talks between the relevant parties and the bus operator have now alleviated this problem, and the buses now stop on the site.
- 2.10 The most recent issues surrounding the Citi4 bus service in Orchard Park centre on the locations of the bus stops. Safety concerns have been raised by the Orchard Park Primary School about the close proximity of the bus stop (and route) to the school. These concerns are exacerbated by the fact that the cycle route through the site finishes before the school, and those wishing to cycle into the school ground must then cross the road used by the Citi4 bus. The second issue raised by residents has come as a result of the bus layover times and locations. Some residents have raised concerns with the Orchard Park Community Council about the length of time some of the buses spend in 'lay over' in the bus stop on Chieftain Way. The County Council are due to consult with relevant partners on possible new locations for the bus stops to ensure that the bus stops are in the optimum locations.

Lessons to be learnt

- 6. It is important for bus routes to be available as soon as possible from when the first residents move in. This could be the extension of existing routes or additional bus stops.

- 7. It may be better for buses to stop at convenient locations on the edge of a site, rather than travelling on to a site until the majority of the construction work has been completed.

Guided Bus

- 2.11 The Cambridgeshire Guided Bus route will run along the southern boundary of the site, with two stops adjacent to the site itself. Together with the Citi4 service, Orchard Park will have very good access to public transport once the Guided Bus is opened. The bus will not run on a guideway for much of this section, instead it will be on a concrete running surface, which is independent from the road and other motorists. At the outline planning application stage there was an illustrative design for the Guided Bus which showed the position of the busway and cycleway, as part of the Transport and Works Act submission in 2004, and Works and Land plans which included information on the levels. The alignment for the guided busway was agreed with Gallagher in 2003 prior to the Public Inquiry, which helped reach a compromise over the optimum alignment of the Guided Bus and at the same time, minimising the land take on the site.
- 2.12 The agreement meant that there was not sufficient space for the busway to be guided. County Officers explained that a guided busway cannot operate below 250m radiuses without widening the gauge to avoid the rear wheels of the bus rubbing against the kerb. The radii at Orchard Park are about half of that, and an alignment at 250m radii would have split the development in two. This would have caused harm to the physical landscape and caused community severance, in addition to diverging on the agreement between the County Council and the developer over land take.
- 2.13 In order to overcome this problem, County Council officers and consultants explored the possibility of widening the gauge to cater for a tighter radius. However, although this works in theory, it has not yet been used in a working in-service guided busway and thus would create significant risk. It also did not lend itself to the County Council's chosen construction technique, which is mass produced pre-cast beams and spacers, due to the fact it would need a large number of special components. The County Council therefore developed a design using an in-situ concrete slab, with steel guide rails. However, with the presence of four junctions, three pedestrian crossings and two stops on the stretch of the route around Orchard Park, it was felt that there would be significantly lower average speeds on the buses, due to the stopping and starting. It was therefore concluded that there was little or no benefit from the steel guide rail, hence the busway proceeded with the in-situ concrete running surface on which the driver will steer, and not run on a guideway.
- 2.14 The busway will still be guided in small sections for two reasons. Firstly, it will still be guided at bus stops in order to give level boarding,

especially helpful for the elderly and less able bodied people. Secondly, it will be guided on the first section from Cambridge Road, due to the fact it is straight here and thus there is the greatest likelihood of it being mistaken for a road (and therefore misused by non guided bus vehicles). These sections will be built using the standard precast units.

- 2.15 Where the busway runs on the guideway in Cambridgeshire, measures that prevent cars and other vehicles using the guideway, known as 'car traps', have been implemented. The bus will not run on a guideway for much of the area around Orchard Park, and County Council officers admit that it is not therefore possible to provide any form of car trap on these un-guided sections. However, it is felt that the design of the junctions means that it will be difficult, especially accidentally, to turn into the guideway route. There will be no way of preventing motorbikes from accessing the busway or cycle track alongside.
- 2.16 The guided bus route is in extremely close proximity to the housing development on Orchard Park. There is a slight buffer in the form of the maintenance track, which will be used as a cycle track, which runs alongside the guided busway. The County Council explained that the noise barriers are only being provided on the Cambridge Guided Bus at locations with existing low ambient noise, such as Histon. This is not the case at Orchard Park, where the busway is already in close proximity to the A14 and Kings Hedges Road. There is also a lack of landscaping between the housing development and the busway, as a consequence of the land being provided to the County Council for the busway being little more than the minimum required to accommodate the busway, and subsequent decisions on the position of houses on individual plots. This is especially poor in the southeastern tip of the development (near plot K2) where the houses were built in error closer to the busway than originally planned leading to the alignment of the busway needing to be altered.

Lessons to be learnt

- 8. With regards to the Guided Busway, there was a need for better communication and coordination at an early stage.

Cycling

- 2.17 There are a number of cycling issues present at Orchard Park and its surrounding area. It is felt by many that the changes to King's Hedges Road and the road junctions around the site as a result of the new development have made it more difficult and dangerous for existing cyclists in the area, and would not particularly encourage the residents of Orchard Park to cycle.

A14 / Cambridge (Histon) Road Junction

- 2.18 County Council officers, along with officers from the District Councils and the Cambridge Cycling Campaign identified safety issues for cyclists when they cross over the A14 at the Histon Junction. The high volume, flow and speed of traffic that use the junction make using it as a cyclist very difficult, particularly for less confident cyclists.
- 2.19 Part of the original S106 money was ring fenced for a cycle bridge over the A14 in order to help cyclists avoid the junction, however the County Council officers explained that the bridge would have needed a lot of land, and would be very intrusive in the landscape. In addition, the S106 money available would not have covered the cost of the new bridge and the County Council could not be tied down to this, especially as significant resources were going to the cycle / pedestrian bridge being built over the A14 at Milton at the time.
- 2.20 The only option for building a bridge, according to County Council highways officer, is over the middle of the existing roundabout, which would be expensive and cyclists would still have several crossings to make. However, other options have been put forward by the Cycling Campaign, and South Cambridgeshire District Council has secured funding to undertake a feasibility study for measures to improve cycling / pedestrian movements in relation to the A14.
- 2.21 A further option discussed is to have signal controlled crossings on the roundabout on the downslips, or have a longer red period on the existing traffic lights to allow cyclists to cross. Any proposals would have to meet Highways Agency regulations on crossings, ensuring there are no resulting congestion or safety issues on the A14 from increased stoppages to traffic. The Cambridge Cycling Campaign considers that signage to alert drivers to the presence of cyclists crossing the slip roads would also be useful.

King's Hedges Road

- 2.22 There are several issues surrounding cycling on King's Hedges Road, which are set out below.

Pinch points

- 2.23 Central traffic islands were introduced on to King's Hedges Road as a form of traffic calming and at crossing points. The Safety audit carried out by the County Council highlighted the fact that the carriageway widths between islands and junctions fall into the range (3.1m to 3.9m) which can lead to problems of cars attempting to overtake cyclists where there is not really enough room. Where widths are less than 3.1m drivers are unlikely to attempt overtaking, as there is clearly not enough room. Where widths are greater than 3.9m, there should be sufficient room to complete the manoeuvre safely.

- 2.24 In response to the Safety audit, the developer said that off road cycling would be provided alongside the Guided Bus route and that they weren't encouraging on road cycling. The safety audit was then signed off. It is unclear why this happened before the safety issues on King's Hedges Road were properly addressed.
- 2.25 Since then, the County Council have begun a process of narrowing the islands in order to increase the kerb-to-kerb widths to 4 m with a 1.2m 'redmac' advisory cycle lane along the north side of Kings Hedges Road from Cambridge Road to Graham Road. This is slightly below the 1.5m standard for cycle lanes on roads¹.

Large junctions with Cambridge Rd and Arbury Rd

- 2.26 In order to avoid traffic backing up on the A14 (a requirement of the Highways Agency) and with the addition of the junctions used to enter and egress the Orchard Park site, the capacity of the road and junctions on King's Hedges Road has been increased for cars. The Cycling Campaign believe this has increased the average speed of the cars, as well as making it evermore difficult for cyclists to negotiate junctions, particularly as it appears the new wider junctions make little on-road provision for cyclists. For example, the junction of King's Hedges Road and Cambridge Road is now very wide. Heading west from King's Hedges Road, on-road cyclists do not receive an advanced reservoir for stopping and starting. Turning right and reaching the off-road cycle path on Cambridge Road involves a sharp right bend, which is not an easy manoeuvre if it is wet, dark or icy. The alternative for off-road cyclists involves 4 toucan crossings.
- 2.27 The straight on on-road cycle lane provided for cyclists coming from Histon and travelling into the city across the King's Hedges Road junction was removed as part of the new junction arrangements. Again this was criticised by the safety auditors and again the developers argued that they did not want to encourage on-road cycling. Following complaints this lane was subsequently re-instated by the County Council.
- 2.28 The junction with Arbury Road and Chariot Way on Orchard Park is also very wide. Travelling eastwards there are four road lanes here and a vulnerable cyclist would have to move out into the fourth lane to travel right into Arbury Road.

Off road facilities – King's Hedges Road

¹ Local Transport Note 2/08: Cycle lanes should be 2 metres wide on busy roads, or where traffic is travelling in excess of 40 mph. A minimum width of 1.5 metres may be generally acceptable on roads with a 30 mph limit. For cycle feeder lanes to advanced stop line arrangements, a minimum width of 1.2m may be acceptable. Cycle lanes less than 1.2 metres wide cannot easily accommodate tricycles or childcarrying cycle trailers wholly within the lane.

- 2.29 Some off road facilities have been provided, however these also have many problems. There is a shared pedestrian/cycle path along the south side of Kings Hedges Road from Cambridge Road to the Cambridge Regional College crossing, sections of which were put in or improved as part of the Orchard Park application.
- 2.30 This shared path is very narrow in the section between Buchan Street and Northfields Avenue and traffic lights were installed in the path further reducing its width. After complaints, the path was then widened at this point.
- 2.31 There are no priority crossings at the junctions with Howgate Road and Buchan Street and there are no facilities at all for crossing Arbury Road. The newly improved path simply stops at the signals, which do not have any crossing facilities or dropped kerbs. The Northfields Avenue crossing was also poor with the designated crossing point at some distance from the desire line across the junction, resulting in pedestrians and cyclists making their way across the islands and slip road as best they could.
- 2.32 The developers contributed £300,000 towards the Northern Corridor Area Transport Plan (NCATP) for improvements to cycling and pedestrian routes. City Council Cycling and Walking Officers met with local Members and the County Cycling Officer to draw up a priority list for schemes to improve pedestrian and cycle links between Orchard Park and Kings Hedges. There was some question as to whether the £300,000 could all be spent in this area and who would be responsible for managing and designing the works. The Cycling Campaign believes that there should be wider public consultation on how S106 funding is spent.
- 2.33 Funds were eventually allocated to specific schemes, of these the eastern toucan crossing from just east of Northfields Avenue to Starr End and improvement to the crossing of Northfields Avenue itself has been part funded from the S106 contribution. The paths are completed but the crossing cannot be put in until the guided bus works are complete allowing the crossing of the guideway (which will be unguided at this point) and access to the bus stop.
- 2.34 Improvements to links to community facilities and shops at Buchan Street are now also underway, and County Officers are looking at what is feasible at the Arbury Road junction, although the cost of incorporating crossing facilities here will exceed the funding available from the NCATP.

Toucan crossings and sheep pens

- 2.35 There is also an issue with crossings on King's Hedges Road. There are only four crossing points from Orchard Park south into Cambridge. These are near the junction with Cambridge Road (east of Howgate

Road), Chariot Way / Arbury Road and Buchan Street. There will be a further crossing at Starr End / Northfield Way (see above). 'Sheep pen' type crossings have been used at the three western crossings for safety reasons to protect pedestrians and cyclists from the speed and volume of traffic that the road receives. However these 'pens' are too narrow, particularly at the multi-stage crossing on Cambridge Road. This can cause problems for bike trailers and pedestrians with buggies as well as frustration at the time it takes to go through the crossing stages to cross either Kings Hedges Road or Cambridge Road at this junction. The result is that many cyclists ignore the crossings and make potentially dangerous manoeuvres around them. It is worth noting that Cambridge, as a cycling demonstration town, has been advised by Cycling England that all cycle crossings should be single stage where possible.

Off road – Cycleway alongside Guided Bus

- 2.36 The maintenance track alongside the Guided Bus way will be used as a cycleway and will help to provide much of the necessary provision for cycling along King's Hedges Road and past Orchard Park. However the slight delay in the opening of the busway has meant that the cycleway is yet to open. The cycleway also fails to cater for all movements i.e. it is good for travelling from Histon to Cambridge Regional College and the Science Park, but not ideal for travelling into Cambridge. Indeed, travelling into Cambridge would mean having to come off the cycle path and crossing King's Hedges Road, which will lead to delays. This is unappealing to regular cyclists, who site the speed and convenience of cycling as major reason for using the mode.
- 2.37 Planning officers from the three authorities, in addition to community leaders and the Cambridge Cycling Campaign all agree that given the delay in the off road provision, and also the issues phasing has had on the quality of the roads through the site, an intermediate measure of having a cycle lane along King's Hedges Road should have been implemented. The Cycling Campaign believe cycle lanes along King's Hedges Road is a necessary permanent measure to encourage and maintain high levels of safe cycling, and believe that not having them here is 'a missed opportunity'. This is particularly the case because the width of King's Hedges Road would mean that there would have been sufficient space for an adequate cycle lane, and the off road cycle route alongside the Guided Bus would never have catered for a significant number of cyclist journeys. The Cycling Campaign and Cycling officers at the City Council both added that if existing residents of Orchard Park have been put off cycling, they will already have established their travel patterns and it may be harder to get people to cycle in the future, even when the off road cycle track is open.
- 2.38 Cambridge is now a cycling demonstration town, and Cycling England (part of the Department for Transport) are providing funding for infrastructure. As part of Cycle Cambridge, the County will be

undertaking a 'review and improve' programme and this could involve looking again at King's Hedges Road.

Cycle routes within the development

- 2.39 The main cycle route through the development is designed as a shared footway / cycleway. Generally shared use pedestrian / cycling paths alongside the carriageway are not favoured by either the City Council or the Cambridge Cycling Campaign. The City and County Council Cycling Officers raised objections to the designing in of 'pavement cycling', particularly of an inadequate width and requested that the route through the site should be segregated from pedestrians. The City Cycling Officer also requested a cycle by-pass at the Chariot Way road narrowing but this has not been provided.

Cycle Parking

- 2.40 There is an underprovision of cycle parking at Orchard Park. The Cycling Campaign has evidence of people attaching bikes to drain pipes and railings, and leaving bikes on internal landings in the blocks of flats because of this. In addition, the garages provided with the housing are not wide enough for both a car and bike. Some houses have no cycle parking provision at all. The cycle parking provided within a covered enclosure for some of the flats has only front wheel fixing racks which do not allow the frame of the bicycle to be locked to anything. Some apartment blocks have covered, enclosed bin storage next to which are a few cycle racks, which have no cover. Theft of bicycles from sheds in back gardens has been a problem at the site, and it is better to have cycle racks and storage by the front doors of properties where there is more natural surveillance and they are easily accessible. SCDC agreed that the design of cycle stores had not been sorted out early enough.
- 2.41 There is also inadequate visitor cycle parking at the site. The community centre has only a limited number of stands and these are not covered. Cycle parking for the school is adequate in quantity, but the racks used do not allow users to lock the frame of their bike securely.

Lessons to be learnt

- 9. Good quality cycling facilities, such as designated cycle lanes and segregated routes both within a development and linking to external routes, as well as cycle parking/storage facilities, need to be in place when residents move in to achieve the highest possible usage. If proposed routes are not in place on a permanent basis from the start, some provision for temporary or interim measures should be made.
- 10. Any changes to the road network associated with new developments should not be to the detriment of existing cyclists and should improve existing routes where possible.

- 11. There should be more discussion between parties at an early stage in the planning process. Consultation on changes to junctions as part of section 106 agreements should include all relevant stakeholders, and the Cycle Liaison Group should further develop its focus on new developments.
- 12. In terms of future developments, the City Council is producing a 'Cycle Parking Guide for New Residential Developments'. In addition the Cambridge Cycling Campaign has produced a useful document entitled 'Cycling in New Developments'. The latest guidance from the Department for Transport is Local Transport Note 2/08 'Cycle Infrastructure Design' October 2008. The Cambridgeshire Design Guide should also act as a guide to designing-in cycle facilities.

Walking

- 2.42 As mentioned subsequently in the section on phasing, the unfinished road and pavement surfaces are causing difficult and potentially dangerous conditions for pedestrians at Orchard Park.
- 2.43 In terms of accessing the site on foot, there are currently no crossings on King's Hedges Road to the east of Buchan Street and pedestrians end up walking on the grass verges on the northern side of King's Hedges Road or on the new cycle path on the road, which is obviously unsuitable and unsafe. As mentioned previously, the toucan crossing between Starr End and Northfields Avenue has now been built but the signals have not been installed. No further crossings are planned across King's Hedges Road.
- 2.44 The new shared path around the eastern side of the junction of Arbury Road/Kings Hedges Road does not follow the pedestrians desire line, which is shown by the diagonal track now crossing the wide verge.

Lessons to be learnt

- 13. The problems for pedestrians within the site are mainly a consequence of phasing issues. Mobility crossings must be provided (even if it is as a temporary dropped kerb before the final surfacing is laid) as early as possible, ideally from when the first residents move in.
- 14. All pedestrian desire lines should be considered when assessing where crossing points are needed.
- 15. Paths should follow desire lines whenever possible.
- 16. Continuous footways should be provided alongside carriageways where possible.

Personal Travel Plans

- 2.45 Cambridgeshire County Council, in conjunction with consultants WSP undertook a pilot Personal Travel Planning (PTP) project at Orchard Park in the summer of 2008. The pilot project brought about a number of positive results, including 82% of respondents indicating that they increased their usage of a sustainable mode as a result of the

intervention, and 35% stating that they reduced the number of trips they make driving alone. However caution must be applied as the project was relatively small-scale which prohibited statistical testing, and there is no analysis of the impact on habitual travel patterns in the longer term. The full report and results are attached in Appendix 3.

- 2.46 Although the results are positive, the pilot PTP was only conducted over a short period and in order to be a success in future developments, as well as in Orchard Park, it needs to be an ongoing project. The newly formed Orchard Park Community Council may look to pursue this as a project when it is fully operational.

Lessons to be learnt:

- 17. The pilot PTP has proved to be fairly successful, and this approach should be considered in other large developments. In particular measures such as providing an information leaflet detailing cycle routes, bus stops and local amenities would be useful in 'welcome packs' for new residents moving in, and would be relatively inexpensive. Ongoing measures would also be useful.

Air Quality and Noise

- 2.47 Cambridge City Council raised concerns to the Orchard Park development in its original responses to South Cambridgeshire District Council's consultation on the outline planning application. It was felt that residential development on the site would not be in line with policy guidance in relation to air quality and noise pollution resulting from the A14.

Noise

- 2.48 As part of original outline application the Environment Statement considered the impact of ambient noise on the proposed development. Road traffic noise from the adjacent A14 was modelled / mapped for various future scenarios with and without noise mitigation measures. Without mitigation measures the distribution of noise across the site varies with distance and topography. Parts of the site closest to the A14 were in 'Category D' of the Noise Exposure Categories (NECs), ranging from A-D and detailed in Planning Policy Guidance note PPG24: Planning and Noise. The majority of site was in NEC B and or C. However noise levels have been reduced to a degree with the building of the noise barrier. The barrier will be most effective for residents at ground level and will become less effective for those who live on the upper floors of blocks of flats where noise will more readily diffract over the top of the barrier. These NECs aim to help / guide local planning authorities in their consideration of applications for residential development near transport-related noise sources. Category A represents the circumstances in which noise is unlikely to be a determining factor, while Category D relates to the situation in which development should normally be refused. Categories B and C

deal with situations where noise mitigation measures may make development acceptable. NEC C: PP should not normally be granted, however if it is considered that permission should be given, e.g. no alternative quieter sites, conditions should be imposed to protect against noise. As part of the original local plan allocation stage and outline planning application, appropriate safeguarding conditions were attached to the outline planning. Noise was to be attenuated either by commercial buildings, as an intervening land use between the A14 and residential development or by a noise attenuation barrier beyond the extent of the commercial use and adjacent to the mixed use which contained residential development.

- 2.49 In the event to enable residential development to start across the site, particularly the affordable housing, an acoustic barrier was agreed along all of the northern edge of the site, adjacent to the A14, with an agreement that the need for this would be reviewed dependent on the delivery of commercial uses. However, it was always the intention to remove the barrier - at least partially - to ensure attractive and open views into the site (see SCDC's 'North Edge Design Brief' for Arbury Park). Commercial uses were planned and were to be designed to achieve maximum 'screening' affect, thereby reducing the exposure of the remainder of the site to increased noise levels.
- 2.50 From a design point of view, the objective of avoiding a permanent noise barrier along the A14 through the use of taller commercial buildings along this boundary was a good idea. However, in practice, the development of commercial buildings has been slow. The hotel has recently opened and an application for the adjacent site for a local centre and commercial uses is still to be determined (currently awaiting amended plans). In hindsight, it would have been better (and this is a lesson for future sites) to ensure sites have sufficient land to allow for the design of a very high quality, attractive and well landscaped noise barrier from the start to mitigate noise for any land use on site, and leave such a noise barrier permanently. The benefit of being able to 'see' into the site from the A14 for passing motorists is far outweighed by the problem of noise for occupants on site and the challenge of achieving tall, continuous commercial buildings on the edge of a suburban site.
- 2.51 SCDC and the developers now propose to use a number of the plots on the northern edge as new areas of residential development, which will mean that the acoustic barrier will need to become permanent to be one of a number of mitigation measures to provide a commensurate level of protection against noise. The current barrier, which was always envisaged as a predominately temporary, needs upgrading in order to reduce the visual intrusion on the site. Given that the fence is on land controlled by the Highways Agency, this is a matter that is now under discussion as part of the A14 widening. Funding for this and agreement of all relevant parties will need to be sought.

Lessons learned

- 18. In the event of noise mitigation being required for residential uses, install a high quality, attractive, permanent noise barrier from the outset rather than attempting to retrofit or remove a barrier at a later date, for which the cost, responsible party and timing are entirely uncertain.

Issues regarding possible transfer of Orchard Park to the City Council

- 2.52 If the City Council takes on Orchard Park as part of proposed city boundary changes, then any noise issues and complaints from residents associated with the current road and the impact of the widened A14 would fall to Environmental Services. It is envisaged that the improvements to the A14 and need to move the existing noise barrier will be an opportunity for the officers to work in partnership with the Highways Authority to secure an effective, suitable and sufficient permanent Orchard Park noise barrier which provides a high standard of baseline noise protection that is aesthetically acceptable. Environmental Services would be able to do little other than offer advice about noise insulation to existing residents in this case. Any future reserved matter applications for housing will need careful consideration in terms of layout / orientation of buildings / external amenity, and noise insulation of building envelope.
- 2.53 Road noise is a function of a number of factors, which include number of vehicles, speed, tyre pattern, road surface and weight. Higher volumes, higher speeds and higher levels of HGVs will increase noise levels. Therefore it is extremely likely that when this section is widened, that noise levels will increase. Additionally the widening will require the removal of the current noise barrier and move vehicles closer to residential accommodation, thereby slightly reducing the distance noise reduction.
- 2.54 The Highways Agency is responsible for the A14 and any noise mitigation measures would fall to them to reduce noise issues from the widened road having regard to their guidance Design Manual for Roads and Bridges Volume 11: Part 1 - Air Quality & Part 7 - Noise And Vibration. It is likely that the appraisal of the construction of the road will require quieter road surfaces and an adequate noise barrier. It should be noted that noise standards can be different in Planning Guidance and DMRB so it is paramount the LA do their utmost to secure noise protection under any requirements they can impose.
- 2.55 Discussions are already underway to ensure this as part of the pre-consultation for A14 road orders. In addition careful consideration has, and will continue to be given to, including measures such as single aspect housing with non habitable rooms only facing the road or full acoustic double / triple glazing and acoustically treated natural and or mechanical ventilation to habitable rooms.

Air Quality

- 2.56 In 2007, SCDC declared part of the A14 Corridor as an Air Quality Management Area (AQMA) because of high levels of NO₂ and particulate matter (PM10). The northern part of the Orchard Park site falls within this AQMA, which indicates that there are high levels of pollutants in the air.

Issues regarding possible transfer of Orchard Park to the City Council

- 2.57 If the City Council were to take on Orchard Park as part of its jurisdiction, then it would also have to take charge of part of the A14 AQMA. This would result in increased costs for the City Council, as there would be an obligation to place new monitoring equipment in the area (there is currently no City owned monitoring here). Even if the SCDC equipment installed at Arbury Park were given to the City it would have staff implications in running it, as well as, revenue implications in maintenance and servicing costs. Furthermore there would be repair and renewal revenue contributions to fund replacement as and when required which would incur costs. Moreover, an authority that enforces an AQMA has a duty to improve the air quality in that area or face possible financial penalties. PM10 does not currently exceed national objectives anywhere within the Cambridge City boundaries and so this would be a new activity for the City Council. In addition the City Council would be required to work in much closer partnership with the Highways Agency, which is responsible for the trunk roads, as this AQMA is as a result of the traffic on the A14.
- 2.58 The obligation placed on authorities to improve the air quality of an AQMA is likely to be hampered in the future by the proposed upgrade of the A14 to three lanes. City Council Environmental Health officers believe that the increase in vehicle speeds as a result of widening the A14 will have a detrimental effect on the total emissions of NO₂ and PM10 in the area. In addition the proposed upgrade of the A14 will bring the road even closer to the development.

3. Community

- 3.1 This section relating to Community firstly focuses on issues relating to the implementation of the development relating to phasing, timing and viability. It then looks briefly at the community facilities and development of a community on the site.

Implementation

Phasing

- 3.2 One of the main messages coming out of the interviews was that the development did not follow a coherent phasing pattern. Condition 3 of the outline planning permission required that a phasing plan be submitted and approved by the Local Planning Authority. The local authority required that the affordable housing be clustered in groups around the development, to ensure a mix with the market housing, which is consistent with Government policy in Planning Policy Statement PPS3: Housing (2006). The RSLs had money available to build the affordable housing, and would lose this if they weren't permitted to start building on site. This has meant that the affordable housing blocks were built in isolated pockets around the site and the subsequent down turn in the housing market has led to these pockets remaining isolated, as the private housing buildout has not caught up.
- 3.3 The phasing problem has been amplified because there was no anticipation of a housing market collapse associated with the global recession. This has resulted in people already living at the site having to live for a longer period of time on what is effectively a building site. This has led to many problems, as the pavements and roads do not have their final finish and there are piles of rubble and construction materials around the site. If the developers finish all of the surfaces now, these will be ruined once building work starts again by the bulldozers and other construction vehicles, which would be a waste of resources. To deal with these problems the developers have put in a safe route, along the main road through the development, in order that people can walk to the primary school. In addition the site has been tidied by removing construction materials and temporary ramps / dropped kerbs have been provided. Housebuilders are now back on site as housesales are starting to pick up in this part of the region, which is very positive.
- 3.4 A phasing pattern where part of the development is completed and then work begins on the next phase would have been preferable, and would have helped to avoid some of the amenity problems currently facing residents at Orchard Park. However, the developer argues that strict phasing reduces flexibility on site, and that particularly in periods of recession such as at the moment, flexibility is key to getting building work started again. They believe that the development of a more robust masterplan at the beginning of the process, which considers all

aspects of the development including phasing, would be more appropriate, than a strict phasing plan. Others consider that a strict phasing plan could have benefits to the developers, as the developers would not be required to put in some of the infrastructure to service parts of a development that did not require it until much later, thereby reducing the frontloading of costs to some extent.

Affordable Housing

- 3.5 The City Council normally requires the affordable housing to be provided in tandem with the private housebuilding and not lag behind it, as set out in the Affordable Housing Supplementary Planning Document (SPD) (2008). At Orchard Park, the reverse has happened for the funding reasons described earlier, which has led to the problems set out above. The distribution of groups of affordable housing throughout a development is intended to prevent areas of social exclusion being developed and is consistent with PPS3 and the City Council's Affordable Housing SPD. A balance needs to be struck between the long-term sustainability of a development which 'clustering' helps to provide, and the impact on residents of clusters of affordable housing being developed in isolation at the start of the development.
- 3.6 Given the pressing need for affordable housing, it is considered that it would be difficult for the City Council to prohibit the provision of affordable housing in advance of the market housing. Therefore each development needs to take into account that affordable housing clusters may be developed in advance of private housing and there needs to be a strategy to address this. This may influence where the affordable housing clusters are located on a site to enable access to services and for construction traffic, whilst minimising their concentration into one part of a site. In addition consideration needs to be given to the provision of temporary facilities and accesses, and measures such as the interim landscaping of unsightly areas. Another possibility that SCDC have been considering to avoid this situation is for all housing to be built by market housebuilders and then RSLs to take over certain units. However, in general RSLs prefer to be in charge of building their own housing units.
- 3.7 At Orchard Park the affordable housing clusters range from 6 to 30 units, although where blocks are close together these could be seen to be a larger grouping. Members of SCDCs Planning Committee did seek clusters of no more than 6 affordable houses, but this was not acceptable to the RSLs. The City Council's Affordable Housing SPD requires clustering of between 6 and 25 dwellings depending upon the size and design of development and the nature of the affordable housing. SCDC were careful in their distribution of affordable housing to ensure they were not on the worst sites at the rear of the development. In addition they have ensured that there is a mix of

tenures in each of the clusters. The City Council also follows these principles as set out in the SPD.

Lessons to be learnt

- 19. A phasing plan should be developed alongside the masterplanning process, and this should be adhered to. This would provide a sequence in the growth of a community and ensure provision of facilities at key times and in the right parts of the site. It would help to reduce residential amenity problems to the first occupiers of a development.
- 20. The distribution of affordable housing groups in developments needs to take into account that they may be developed in advance of the private housing (given funding constraints and the pressing need for such housing in the area) which may influence where they are located on a site to enable access to services and for future construction traffic, whilst minimising their concentration into one part of a site. Consideration needs to be given to the provision of temporary facilities and accesses, a good management regime that keeps the site tidy, and measures such as the interim landscaping of unsightly areas, although these will have cost implications.

Timing

- 3.8 As described in SCDCs Scrutiny Review, the Section 106 agreement for Orchard Park was very thorough and an example of best practice, and built upon expertise gained at Cambourne.
- 3.9 The Section 106 agreement includes several trigger points for community provision. The triggers are based upon the number of houses occupied. There has been criticism from residents that the trigger points were missed and there have been delays in the provision of the facilities, and that SCDC should have taken enforcement action. The developers argue that although there was some slippage in the commencement of works in line with the 'commencement trigger', the provision of facilities will roughly be in line with the 'provision trigger' which is also based on the number of occupations. The SCDC Scrutiny Review highlighted the fact that the S106 agreement had not been adequately monitored or enforced, and as a result two new posts were created at SCDC; a S106 negotiator and a S106 monitoring officer whose role will be to ensure compliance.
- 3.10 The developers criticise the over prescriptive nature of the section 106 agreement, which does not easily allow changes to the detail of the public facilities, such as the community centre and the playing pitches, which are being built by the developer. However, the need for much more detailed specifications was picked up by SCDC as a lesson to be learnt from Cambourne. SCDC agreed outline specifications for the sports facilities (including surface type, fencing quality etc) but also included the need for facilities to meet the relevant Governing Body

standards at the time of being built and also to be constructed by an approved and experienced company. As the developers were building the facilities, this was an attempt to guarantee quality and standards whilst having some flexibility to change with the times. There was an opportunity for the Parish Council to be involved in the specifications for the community centre and sports facilities at the reserved matters stage. The City Council have addressed specifications for sports pitches in a similar way in the major growth sites such as the Southern Fringe, by requiring outcomes, including the functions and level of performance that is required, and that facilities are to the standard of the relevant industry body or subsequent equivalent.

- 3.11 SCDC believe that it might be better to negotiate a capital sum and site size for community facilities in the S106 agreement and then the local authority should take control of procurement and build. This also ensures flexibility of design and community involvement.
- 3.12 The timing of the provision of facilities is difficult and needs to be thought about early in the planning of the development. The S106 agreement can control the provision of the school, community facilities and open space, but commercial facilities will not be viable until there is a critical mass of people living at the site. For example, 473 dwellings are occupied, yet none of the shops have been provided so shopping habits have already been formed. The hotel opened on 1st May 2009, but the licence at the bar means that only residents of the hotel can use this facility. Residents have indicated that the provision of a pub on the site in the early stages would have been welcome, providing a meeting place and helping to build a sense of community. However, it is unlikely that a brewery would be interested until most of the site has been developed and is occupied, for the same viability reasons as the shops. As an example the pub in Cambourne was not open until 7 years after the first house was occupied. Another small detail is that there is no post box on the site, though there are some within easy walking distance and one is planned within the local centre when this is built.

Lessons to be learnt:

- 21. To prevent the delay in the provision of community facilities, strong monitoring of the S106 is required and stricter enforcement action may be necessary. Consider the need for a S106 monitoring officer.
- 22. Consider if there should be some flexibility in the S106 agreement, in terms of the finer details, and consider simplifying the process involved in handing over facilities.
- 23. Consider negotiating a capital sum and site size for community facilities in the S106 agreement and then the local authority can take control of procurement and build. This also ensures flexibility of design and community involvement.
- 24. It would be useful to provide basic facilities such as a post box early in the development.

Viability

- 3.13 There was no back-up plan to address viability problems, which have come about due to the economic downturn. This needs to be considered for future major developments, however it is a very complex area with no easy solutions. At Orchard Park viability is currently being approached by considering intermediate rented housing or rent now and purchase in the future schemes. One site identified for market housing has been transferred to a RSL to provide affordable housing. A Partners Group has been set up to look at how to kick start development again (for further information, see the section on Communication / Collaboration below). This group and the delivery boards on the other growth sites will help partners to respond quickly to issues as they arise.

Lessons to be learnt:

- 25. Consider whether it would be possible to have a viability back-up plan, and what form this would take. In practice, this may relate to having review stages in the event of an economic downturn, and building in flexibility for introducing different land uses or intermediate/temporary uses.

Masterplanning

- 3.14 Condition 1 of the outline planning permission requires that all development shall take place in accordance with the Development Framework Plan (or approved revisions thereof). At the initial masterplanning stage, SCDC did not have any urban designers, which led to some weaknesses in the overall design. This problem has now been rectified by the setting up of the Joint Urban Design Team with the City Council. Many parties have said that the primary school should have been located at the centre of the development, alongside the community centre and the local centre. This would have given a stronger local centre and would have been more easily accessible from the whole of the development site. The original plan was for a school / community centre to be located in the middle of the site, however land constraints prevented it being located here. However if the school had been provided in the centre of the site then it would have been opened later in the development unless forward funding had been secured for the provision of the services and utilities for the school. Hence consideration needs to be made of how to balance the provision of services (in their final state) for the very first residents and how phasing and practical build out of a site may mean that facilities are provided later in the development.
- 3.15 The S106 agreement accompanying the outline approval required the approval of a design guide for the entire site. This was produced by John Thompson and Partners, however they were not retained beyond the production of the guide to help evaluate schemes and it took some 7 drafts of the documents and 2-3 years to complete and gain approval

from the Council (in October 2008). This was far too late after hundreds of houses had already been built, although SCDC did use interim versions to assess detailed applications. It would have been far more effective, having decided to require a design guide, for the District Council to have: promoted the on going retention of the master planner in reviewing schemes against the design guide; set up a design panel earlier in the life of the development; required the design guide as condition, not part of a S106 agreement, or required it with the submission of the outline application and given it status alongside the outline approval; and commissioned additional detailed design advice on key sites.

- 3.16 Parcels of land are not always being developed in line with the Development Framework Plan. For example, areas identified for mixed use in the north east corner of the site have been developed entirely as housing. SCDC say that this has occurred because it has been difficult to encourage other uses to the site and there was a pressing need for affordable housing. In addition parcels identified for commercial development, adjacent to the A14 and a parcel identified for mixed use on the corner of King's Hedges Road and Cambridge Road, have been recommended for housing to their Local Development Framework Inspectors to help make up the SCDC housing short fall, reflecting developer aspirations to put residential on this site, which passed the South Cambridgeshire site assessment process.
- 3.17 The original vision for the site was for a mixed community with houses, employment and shops. However, changing the mix on site to almost all housing will make it less sustainable, and will affect the traffic flows in and out of the site. In addition, the commercial development was put adjacent to the A14 in order to shield the housing development from traffic noise. Environmental Health Officers at the City Council believe that building housing right up to the A14 is unsuitable in terms of noise and air quality and will also mean that there needs to be a permanent noise barrier at the site. SCDC Officers have had similar concerns, however following an appeal by Barrett Homes the principle of housing with a retained noise barrier has been established. The City Council made representations to SCDC housing short fall consultation, objecting to these sites and stating that further work needs to be carried out in relation to noise and air quality before the sites are allocated for development, to ensure that a satisfactory residential environment can be created. This matter is being addressed by the Inspectors at the forthcoming Examination in to SCDCs Site Specific Development Plan Document.
- 3.18 If the Development Framework Plan is not followed, there is the risk that individual applications do not fit together. As such this is a matter that is considered with any application that seeks to depart from the Development Framework Plan, as an approval automatically acts to update the document.

Lessons to be learnt:

- 26. Design Guidance, if it is to be used in future developments as a tool, (Design and Access Statements, Design Codes and other tools have somewhat superseded this need) must be developed and approved earlier in the process, before it is needed to assess the first detailed or reserved matter applications.
- 27. A Design Panel should be arranged early on in the review process with appropriate administration support and have real status in the planning process.
- 28. Early engagement with the Joint Urban Design Team is critical to help avoid poor quality submissions.
- 29. Any 'Development Frameworks' need to be robust but flexible, and to be supplemented by more detailed design guidance such as design codes. Current practice requires submission of a Design and Access Statement. The City Council now requires submission of a Design Code to implement the Design and Access Statement.
- 30. The retention of the 'masterplanner' should be encouraged throughout the life of the development in order to ensure consistency, or complementarity, of design across the scheme.

Communication / Collaboration

- 3.19 Communication and collaboration is another very important part of the Quality Charter. Communication between all parties at Orchard Park has improved greatly and is helping to solve problems. There are several groups in place whom meet, and the purpose of these groups and the attendance is set out in Appendix 4.
- 3.20 The Partners Group has been tackling major issues at the site, and more recently started to consider measures to support development again. This is a strategic level group set up in response to the SCDC Scrutiny Report. It involves the developers, land owners, SCDC, the County Council, Cambridgeshire Horizons and the RSLs.
- 3.21 Gallagher believe that the Developer Liaison Group is very useful and has become particularly effective over the last year. This involves SCDC and the master developer, but recently the individual housebuilders have been invited and it could also be opened to the RSLs.
- 3.22 The Orchard Park Action Group (OPAG) was also set up in response to a recommendation in the SCDC Scrutiny Report. The Committee recognised that communication with the community is important recommended that SCDC and the master developer set up a group with the local parish and district councillors, and other key members of the local community to identify and resolve issues. The group compiled a detailed Issues Log that was reviewed and updated at monthly meetings from October 2008 to February 2009. Since the Community Council was formed in April, the issues log has been

considered at Council meetings, and this arrangement will be reviewed during the summer.

- 3.23 The Orchard Park Interest Group is a liaison group for practitioners involved in frontline delivery of services across the development. It meets every other month and involves representatives from SCDC, Orchard Park Community Development Officer and Youth Worker, residents, police, health and the school. This group ensures good local communication between different agencies working on-site, and through its membership links with the Community Council, OPAG and Residents' Forum.
- 3.24 When residents move into Orchard Park they receive a Welcome Pack. This has recently been revised to a Welcome Pack on arrival and a fuller information pack a couple of weeks later. The Community Development Officer (see below) also produces a monthly newsletter to all residents, and a community website has been in place for some years set up by a local resident. In addition to new residents it would also be useful to provide information to existing residents in the surrounding area in relation to progress with a development, with regular updates.
- 3.25 Delivery Boards have already been set up for each of the urban extensions around Cambridge in order to ensure their delivery. This is key to joint working and effective delivery of these major developments, and it is important that these have been set up at an early stage. Delivery Boards have already been set up for each of the urban extensions around Cambridge in order to ensure their delivery. This is key to joint working and effective delivery at officer level of these major developments, and it is important that these have been set up at an early stage to monitor key risks. A Joint Strategic Growth Implementation Committee (JSGIC) (comprising councillors from Cambridge City Council, Cambridgeshire County Council, and South Cambridgeshire District Council) has been set up to provide a strategic mechanism for each local authority and Cambridgeshire Horizons to explore issues to ensure that the growth agenda is driven forward in an integrated, coherent and consistent manner. Its three monthly meetings are working meetings and the public and media are welcome to attend the open part of the meeting as observers.

Lessons to be learnt:

- 31. Ensure effective communication by setting up relevant liaison groups at an early stage. These should include all parties, including the individual builders and RSLs on site. The Delivery Boards should fulfil this function at an agency level. It is important that this is complemented by a more local member/resident group like OPAG.
- 32. Consider use of Welcome Packs, and a newsletter to be sent to new residents and existing residents who are affected by a development, to keep them informed about progress and where there are any opportunities for them to be involved.

Development of a Community

Community Facilities

- 3.26 Orchard Park has been seen to some extent as a stand alone community with its own self-contained community facilities being provided. This has partly come about due to the physical characteristics of the site being surrounded on all sides by large roads, which are barriers to movement, and also, because the site is within SCDC, though directly adjacent to the City. SCDC considered all existing facilities within the City but still took a view that there was a need for a small community meeting space within Orchard Park, in order to help promote community cohesion within the new community. The facilities at Orchard Park will include a community centre and community wing in the primary school.
- 3.27 In close proximity are Buchan Street Neighbourhood Centre, and the Meadows Community Centre. At a slightly greater distance are Nun's Way Pavilion, No 37 Lawrence Way which is a community house and Arbury Community Centre associated with Colleges Nursery. In terms of sports provision there are facilities at Cambridge Regional College, the sports centre at Manor School and King's Hedges Learner pool. There are also faith groups in the area, and no facilities specifically for faith use were proposed at the site. In light of the indoor sports facilities at CRC and in the local area it was agreed that facilities within Orchard Park should be outdoor sports pitches and courts. There are also two equipped play areas and local landscaped areas.
- 3.28 Some parties have said that there may be an over provision of community facilities on the site, given the provision in the surrounding area. The new community centre has been built at the site and is due to open this summer. It will be a great asset to the community. The ceiling heights are low, but do not prevent the use of the building and it was never intended to be used as a sports facility given the number of facilities in the local area. There are also two community rooms in the primary school. The school has a hall which could potentially be used as a community or recreation facility.
- 3.29 Discussions revealed that the school and associated community rooms could have been designed better, as to access the community rooms you currently have to enter via the school entrance or through a fire exit door. Ideally the community rooms and school should have separate entrances, and the community rooms could be outside the more stringent security measures required for the school. In addition, the staff room was located looking out over the car park, whereas the teachers want to oversee the playground during break time. Therefore the staff room was swapped with one of the community rooms, resulting in a large staff room and a smaller community room which is

not ideal. SCDC informed us that the primary school was never designed for wider community use and is therefore not as suitable as it might be. This is due to the decision for the separate stand alone facility in the centre of the development. The Joint Urban Design Team is currently working with the County Council on school design, particularly in relation to the expansion of the Fawcett School and the new primary school at Trumpington Meadows in the Southern Fringe.

- 3.30 The school was opened in September 2007, which is relatively early in the development of the site. The first residents moved to Orchard Park in 2007 and it was felt by some that it would have been useful to have some form of temporary meeting place, for example in one of the built houses. A community house was initially discussed with the RSL as a possible base for the community development officer, however this was never implemented. There may be a case in some of the larger developments for having some form of temporary shops. However, the provision of temporary facilities does have to be considered carefully, as this would have implications for the S106 package.
- 3.31 Once the community centre is opened this will be taken on by the Community Council and the idea is that it should be self supporting as revenue will be raised from renting out the rooms. The outdoor sports facilities are also expected to self-funding as there is a Multi-Use Games Area (MUGA).

Open Space and Sports Provision

- 3.32 There are seven areas of public open space being provided at Orchard Park, and these will be a great asset to the community. Public Open Space 1 (POS1) at the western end of the site includes sports pitches and a skate board park, and others include children's play equipment. The Topper Street play equipment is the only one opened at the moment and is very popular. POS 6 and 7 are now open to the community and POS4 surrounding the community centre is going through the handover process at the moment.

Community Development Officer

- 3.33 There is a Community Development Officer (CDO) at Orchard Park whose role is to help support the community to set up. The role is half funded from the S106 agreement and half by Bedfordshire Pilgrims Housing Association and is based next to the community rooms at the school. Before the school was opened the community worker was based at Buchan Street Neighbourhood Centre and there has been joint working with the City Council. There is also input from a Youth Worker and a Neighbourhood Artist. The CDO role only has sufficient funding from the S106 agreement for the first five years of the development.

- 3.34 The CDO has been involved in helping to set up the Community Council and neighbourhood watch groups, and organising social events. Generally it is felt that there is a good sense of community at Orchard Park and there will be good facilities on site once they have been built and opened. However, there have been some problems with antisocial behaviour including vandalism and burglaries.

Governance and the new Community Council

- 3.35 Governance at Orchard Park has been complicated during the last twelve months. Orchard Park fell within Impington Parish Council (IPC) area and from the early stages of the development it was always envisaged that a new parish or Community Council would be set up. The Community Council was expected to be created in November 2008, but Government changes to the procedure meant that it could not be set up at this time. A Shadow Community Council was formed as a precursor, with formal decision making remaining with IPC. The parish of Orchard Park was created on 1st April 2009, and three of the local SCDC Ward Councillors ran the Community Council in the interim period until elections could take place in June. During the nomination period all nine places on the Community Council were filled and these candidates have been elected unopposed. The first meeting of the elected Community Council is planned for 10th June. The Community Council will take on the ownership of the community facilities as they are completed.
- 3.36 Governance may also be complicated at the proposed Trumpington Meadows development in the South of the City. This development is split between Cambridge City and SCDC. The part of the site in SCDC falls within Haslingfield Parish Council however unlike Orchard Park, the option to establish a new Parish or Community Council for this area, is not being progressed, following local consultation. The Trumpington Meadows site has been identified as being transferred within the City Council area as part of the current boundary review. Depending on the date of the boundary review, all housebuilding may take place within the city council area. SCDC and City officers are working together to seek to ensure there is a joined-up approach to community engagement and involvement.

Lessons to be learnt

- 33. Good governance arrangements are important. It will be particularly important to consider governance arrangements at an early stage where a site crosses the boundary between Cambridge City and SCDC, with its Parish Councils.
- 34. The need for some form of community provision from when the first residents move in – this could be temporary use of one of the houses. However, this needs to be carefully considered, as it would have implications for the S106 package.

- 35. The detailed design of community facilities is very important i.e. separate access to community facilities from school, ceiling heights in community centre prevent sports use. The Joint Urban Design Team and the County are currently working together on school design.
- 36. Community Development Officer, Youth Worker and Neighbourhood Artist are very useful roles in helping to build a successful community. The length of time these roles are provided for needs to be considered carefully in the S106 agreement.
- 37. The requirements of faith groups need to be taken into account at an early stage in order to identify if any provision needs to be sought.

Issues regarding possible transfer of community facilities to the City Council

3.37 If the boundary change is approved and Orchard Park is transferred into the City Council area, it is not clear whether the Community Council will continue to exist. Legal advice will need to be sought in this regard. The City does not have parish councils like SCDC, and it is the City Council that usually adopts public open space and community facilities associated with new developments. If the City Council was to take on these facilities it is assumed that any remaining S106 money would also be transferred, however there could be resource implications for the City Council. The amount of money negotiated in the S106 for maintenance of open space may not follow the same standards as the City Council. The City would not adopt the play areas unless they were up to specification and had the relevant inspection certificates. Similarly, the City will need to ensure the adequacy of other recreation and green infrastructure, and that it is of a standard fit for purpose. Three of the areas of public open space have drainage storage tanks underneath them, and this may affect whether the City would be willing to adopt them. Similarly the community buildings could have resource implications. Arbury Community Centre is self supporting, however it still needs to apply for Area Committee grants.

4. Climate

- 4.1 At the time of the outline permission, climate change and sustainability were not as prominent in planning policy as they are today. Orchard Park performs relatively poorly in relation to many of the aspects of climate change covered by the Quality Charter and is a missed opportunity. However, the site does have the advantage that it is at the edge of Cambridge and as such is in a relatively sustainable location with a choice of modes of transport available. The whole site apparently has a 'good' Ecohomes rating, but this is mostly related to the sustainable location of the site.
- 4.2 Carbon emissions for the new buildings will be in line with building regulations at the time of build, and as a result of the lack of policies for this site, none of the private housing schemes have any decentralised, low carbon or renewable energy provision. The RSLs have provided ground source heat pumps at one land parcel, and solar panels on properties in another. However, there have been problems with the ground source heat pumps, with hot water taking precedence over heating and people have found that it makes their electricity bill high.
- 4.3 The approach taken by SCDC was to take S106 contributions for an 'innovation fund', aimed at enabling house builders to bid to install renewable technologies. The idea behind it was primarily to provide an incentive to private house builders to take an interest in renewable technologies and develop the knowledge and expertise that there was no incentive for them to do otherwise. By early 2006 it was clear that this innovation fund had major limitations, as house builders showed little or no interest in bidding for the funding, which it is believed they had to match. Part of the funding was therefore provided to the school to install a vertical axis wind turbine and solar thermal panels, with a real time energy display for educational purposes, so the pupils could see what energy was being provided by the renewables. The innovation money was also used to contribute towards the personalised travel planning project; and, pending final approval, the green roof on the Community Centre.
- 4.4 All of the reserved matters applications have now run out and therefore full planning permission will be required for the remaining parcels. SCDC will therefore be able to seek 10% on site renewables in the future in line with policies in their Local Development Framework.
- 4.5 No rainwater harvesting or grey water recycling systems have been installed on the site. Water efficiency is only due shortly to be included within the Building Regulations. Therefore future phases of build will have to meet these standards, which represent approximately a 17% improvement on the national average domestic water consumption. Subsequent SCDC policies for Trumpington Meadows in their new LDF did include a water conservation strategy as a requirement. However,

this fell short of setting particular standards for water consumption and was interpreted to some extent by developers as only relating to flood risk.

- 4.6 There are no Sustainable Drainage Systems (SUDS) at the site. There are large storage tanks under the roads and three of the areas of public open space. The No 1 Cambridge public drain flows underneath King's Hedges Road and a balancing system was required for the area, before water is discharged at the correct rate to the River Cam. Anglian Water will adopt both the foul and surface water drainage systems. The ground water level is high at the site and this has led to problems with the storage tanks rising up under the open space. Extra earth has had to be placed on top of the tanks to hold them down and as a result the open space is at a higher level than originally planned.
- 4.7 As the adoption process was not established at this time, it would have been hard, even with firm policies in place requiring SUDS, for DC officers to secure a SUDS scheme for the site. The report commissioned by Cambridgeshire Horizons on behalf of both authorities looking at options for adoption of open space and SUDS has played a pivotal role in helping to unlock this problem.
- 4.8 Unsurprisingly due to the policy framework at the time there were no policies on either mitigation or adaptation to climate change that would now be expected if policy was being developed. Had policies on carbon reduction, water conservation and SUDS been included, this would have gone a considerable way to meeting both these policy requirements.
- 4.9 SCDC officers advised that bin collections and recycling have moved on greatly since the original plans and therefore storage for all of the different bins may not be adequate in the earliest builds.

Lessons to be learnt:

- 38. Incentives alone may not be enough to encourage developers to incorporate higher sustainability standards. Therefore it is essential that strong climate change mitigation and adaptation policies are developed as part of the Local Development Framework. Policies should set specific targets as far as it is reasonable to do so. They should also be future proofed as far as possible, for rising standards over time, especially for large sites with long build out periods, so that they do not become rapidly out of date.
- 39. Seek to identify strategic barriers to delivering policy aims, such as the adoption of SUDS, as early as possible and work jointly with other authorities to deliver better outcomes at lower cost.

5. Character

- 5.1 Some of the issues relating to character as set out in the Quality Charter, have been mentioned elsewhere in this report in relation to the master planning of the site, open space, car and cycle parking and lack of landscaping in some parts of the development adjacent to the Guided Bus. Therefore this section only addresses issues that have not been covered elsewhere.

Design

- 5.2 The design of new buildings varies in quality and style greatly across the site. While the Arbury Park Design Guide did provide some basic level of design guidance for buildings, there is little continuity between various phases of the development in terms of materials and quality of design. Far greater co-ordination between the developer and house builders should have been sought which would have helped produced a more consistent building design and quality across the site. Urban Design advice should have been much more deeply integrated into the design review process, and earlier on, as part of the detailed planning application process.

Quality of Build

- 5.3 SCDC officers indicated that the quality of the build has been a problem in some parts of the site. In particular when the housing market was buoyant the building was carried out very quickly leading to poor quality and errors in the building work. For example, pipes were put on the outside of buildings and coloured render was not applied and had to be subsequently painted. As mentioned previously one of the housing blocks was built in slightly the wrong place, which had an impact on the Guided Bus route.
- 5.4 One suggestion to help improve day to day problems, would be for S106 money to be used to employ a Clerk of Works who would be responsible for day to day monitoring of building work at the site.
- 5.5 Another problem has been that it is not always clear who has responsibility for fixing problems, particularly when sub-contractors are working on site. The community worker and SCDC have been liaising with Gallagher in response to issues raised on site. SCDC keeps an Issue Log, including who is responsible for carrying out actions to solve the problem and an anticipated completion date.
- 5.6 Tree planting and landscaping will not be carried out until building works have been completed, in order that works are not ruined. This again relates to phasing, and the benefits of completing one area to create a finished environment for people to live in before moving on to subsequent phases. Over 100 street trees have now been planted at Orchard Park, in the first phase of planting.

Lessons to be learnt:

- 40. Ensure a more consistent approach to building design through the facilitation of closer design working between the Council, developer and house builders. A more detailed design code or guide should be produced to help guide all involved and a Design Panel should be created very early on to help support Planning Officers and the Joint Urban Design Team in its role in ensuring a high quality of design and consisted approaches across the entire site.
- 41. Proactive monitoring and enforcement is important to ensure that a development is built according to the approved plans. The use of S106 money to employ a Clerk of Works on site should be considered to ensure quality of build.
- 42. It is useful to have a snagging list / issues log so that people know where to register any problems and these can be addressed by the responsible organisation. This could be managed by the Clerk of Works, if one was employed.

6. Evaluation against the Quality Charter

- 6.1 There is no guidance within the Quality Charter as to how to evaluate a development against its principles. Therefore a broad assessment has been made, which is useful in identifying the strengths and weakness of Orchard Park.

Community

- 6.2 There seem to have been a number of problems associated with implementing the development on the ground. This has not been helped by the economic downturn, meaning that the developing community is living in an environment with relatively poor residential amenity. There is also uncertainty as to how long this will last.
- 6.3 However, it is envisaged that the final scheme will be good in terms of the provision of community facilities, and that there is a growing sense of community, which the Community Council will help to take forward.

Connectivity

- 6.4 Many of the connectivity problems relate specifically to the site, and its location surrounded by large roads which act as a barrier to movement. However, the engineering measures that have been introduced, particularly on King's Hedges Road, do not seem to have been particularly successful in aiding movement for pedestrians and cyclists, and priority for the car still dominates. Measures for public transport are more successful, with the Citi 4 bus now entering the site and two stops proposed for the Guided Bus.

Climate

- 6.5 Orchard Park has the advantage of being in a relatively sustainable location at the edge of the City, although the concerns about walking and cycling above are relevant. However it scores poorly in relation to additional measures to lower carbon emissions and conserve energy and water, as there are very few measures on site. This is partly due to the age of the development where climate change wasn't yet the priority it is today. Technology and innovation in this area has been improving rapidly and future developments around Cambridge should be able to perform much more strongly.

Character

- 6.6 The design of Orchard Park is fairly good, although it is not particularly innovative. Some areas of housing are better than others, with the area round the Circus being one of the better areas. The areas of open space are a definite positive feature of the site. The site is not yet complete and so it is difficult to judge until all the landscape planting has been carried out, and all areas have been constructed.

Collaboration / Communication

- 6.7 Collaboration and communication have become more effective over time with the setting up of groups such as the Developer Liaison Group, Partners Group, OPAG, Design Panel, and Joint Urban Design Team. Lessons have been learnt from Orchard Park, which will enable more effective communication and collaboration on the other major developments at an early stage, which are critical to their success.

7. Conclusions

7.1 The table below brings together all the lessons to be learnt from the rest of the report. Where measures have already been put into place to address some of these issues, in relation to the other major developments around Cambridge, these have been noted in the table.

7.2 Issues identified in the report in relation to the possible transfer of Orchard Park to the City are also set out below.

Lesson to be learnt	Current position in the urban extensions
Connectivity	
1. There need to be early discussions with car clubs in order to create a development where these would be viable. This may involve limiting the amount of car parking even further.	This needs to be designed in at the earliest stage of the urban design process/masterplanning. Once a condition on car parking levels has been agreed it can't be subsequently revisited.
2. Ensure the adoption of any on-street car parking is agreed to by the County Council and is designed into the masterplan at the very start of the design process.	The adoption of on street car parking will be achieved through the design code and joint working with the County Council.
3. Follow best practice guidance nationally in the provision of car parking, such as that contained in "Car parking: What Works Where" by English Partnerships and the 'Cambridgeshire Design Guide'.	This involves a two stage process, first through design coding setting out car parking rules (location and arrangement), and second through reserved matters applications. None of the urban extensions are yet at this stage.
4. Work with the County Council to try to get roads adopted as soon as possible. A strong phasing plan should help with this.	Officers will work with the County Council to try to address these issues.
5. Do not over provide for motorised traffic with multi-lane junctions at accesses into residential developments.	This needs to be considered carefully in relation to the Long Road junction with Clay Farm.
6. It is important for bus routes to be available as soon as possible from when the first residents move in. This could be the extension of existing routes or additional bus stops.	The Southern Fringe developments are making contributions to the County Council towards both conventional bus revenue support and Guided Bus revenue support.
7. It may be better for buses to stop at convenient locations on the edge of a site, rather than travelling on to a site until the majority of the construction work has been completed.	This would need to be discussed in detail with the County Council and Stagecoach to verify what is practical/reasonable in each instance.
8. With regards to the Guided Busway, there was a need for better communication and coordination at an early stage.	This was still an issue in the Southern Fringe and caused problems with the Clay Farm application and Addenbrooke's application processes.
9. Good quality cycling facilities, such as designated cycle lanes and segregated routes both within a	In the Southern Fringe the cycle routes are indicatively shown on

<p>development and linking to external routes, as well as cycle parking/storage facilities, need to be in place when residents move in to achieve the highest possible usage. If proposed routes are not in place on a permanent basis from the start, some provision for temporary or interim measures should be made.</p>	<p>parameter plans. Subsequently through design coding of public highway and green spaces the detail design of cycle facilities will be worked up.</p> <p>Cycle routes are also indicatively shown on the parameter plans for the NIAB site. Detailed design of the junctions and access roads into the site are a condition of the outline application and there have been a number of productive meetings between City and County officers and the Cycling Campaign to provide innovative solutions for cyclists, providing both on and off-road alternatives.</p> <p>The challenge will be to provide a safe and attractive environment for cyclists and pedestrians within the development where currently a highly desirable through route for motor traffic is proposed.</p> <p>City and County Officers feel strongly that the development of this site provides the opportunity for a safe cycle route to Impington (particularly to the college) via the accommodation bridge over the A14, avoiding the Histon roundabout. Developers are reluctant to provide this route until development of the land to the north of the site in SCDC is agreed.</p>
<p>10. Any changes to the road network associated with new developments should not be to the detriment of existing cyclists and should improve existing routes where possible.</p>	<p>Changes to road network are part of the consideration of outline applications.</p> <p>Catering for additional vehicular movements at junctions without a consequent increase in congestion is difficult to achieve without disadvantaging pedestrians and cyclists. Traffic modelling usually overlooks non-motorised modes and additional traffic lanes and multi-stage crossings are the result.</p> <p>Through the approval of conditions associated with outline approval as well as the design coding and reserved matters stages, mitigating measures are</p>

	<p>being proposed with on road facilities provided, islands widened to allow manoeuvrability for cyclists and guard railing kept to a minimum.</p> <p>County and City Officers have discussed concerns regarding the junction arrangements outlined in the reserved matters application for the Clay Farm Spine Road, particularly the size of the junction with Long Road and the effect this will have on existing cyclists and pedestrians. As of yet consensus has not been reached.</p>
11. There should be more discussion between parties at an early stage in the planning process. Consultation on changes to junctions as part of section 106 agreements should include all relevant stakeholders, and the Cycle Liaison Group should further develop its focus on new developments.	<p>Walking and cycling and equestrian routes were designed into the Southern Fringe masterplanning process as part of the Area Development Framework process.</p> <p>Contributions towards the provision of the routes are being secured through the S106 agreements.</p>
12. In terms of future developments, the City Council is producing a 'Cycle Parking Guide for New Residential Developments'. In addition the Cambridge Cycling Campaign has produced a useful document entitled 'Cycling in New Developments'. The latest guidance from the Department for Transport is Local Transport Note 2/08 'Cycle Infrastructure Design' October 2008. The Cambridgeshire Design Guide should also act as a guide to designing-in cycle facilities.	<p>Designing in cycle parking facilities from the outset is vital.</p> <p>The 'Cycle Parking Guide for New Residential Developments' expands on existing guidance with examples of good practice and will help ensure a workable application of the districts' cycle parking standards.</p>
13. The problems for pedestrians within the site are mainly a consequence of phasing issues. Mobility crossings must be provided (even if it is as a temporary dropped kerb before the final surfacing is laid) as early as possible, ideally from when the first residents move in.	Provision of mobility crossings before occupation should be a condition of any application.
14. All pedestrian desire lines should be considered when assessing where crossing points are needed.	These are being considered through the design coding and reserved matters stages of the Southern Fringe developments.
15. Paths should follow desire lines whenever possible.	These are being considered through the design coding and reserved matters stages of the Southern Fringe developments.
16. Continuous footways should be provided alongside carriageways where possible.	These are being considered through the design coding and reserved matters stages of the Southern Fringe developments.
17. The pilot PTP has proved to be fairly successful, and this approach should be considered in other large developments. In particular measures such as providing	

an information leaflet detailing cycle routes, bus stops and local amenities would be useful in 'welcome packs' for new residents moving in, and would be relatively inexpensive. Ongoing measures would also be useful.	
18. In the event of noise mitigation being required for residential uses, install a high quality, attractive, permanent noise barrier from the outset rather than attempting to retrofit or remove a barrier at a later date, for which the cost, responsible party and timing are entirely uncertain.	This is being addressed in the Southern Fringe and has been taken forward as part of the considerations for 'NIAB Extra' and NW Cambridge AAP proposals.
Community	
19. A phasing plan should be developed alongside the masterplanning process, and this should be adhered to. This would provide a sequence in the growth of a community and ensure provision of facilities at key times and in the right parts of the site. It would help to reduce residential amenity problems to the first occupiers of a development.	<p>The phasing information provided by the applicants as part of the outline submissions is indicative only and phasing conditions are attached to all the Fringe Sites applications/draft permissions that have been to Committee so far.</p> <p>One of the problems is that most services require facilities to be delivered at a very early stage in the development process regardless of where within the overall development the facilities are located. E.g. schools, community facilities, transport infrastructure etc. This has financial implications for the developers in that S106 obligations are significantly "front-loaded". Further consideration needs to be given to how such phasing issues can be addressed effectively in terms of delivering sustainable communities whilst at the same time ensuring that the level of the developer's financial in the early stages of development is recognised and that facilities /infrastructure is also phased where possible.</p> <p>It should be noted that Countryside are challenging the phasing conditions on Clay Farm and Glebe Farms as part of the planning appeals on the basis that they are too onerous.</p> <p>On Trumpington Meadows, efforts have concentrated on early delivery of the primary school in the centre of the site which will have significant benefits. However, this may still</p>

	<p>entail use of temporary access arrangements for some time, because the cost of putting in the whole of the spine road right up to the school, as part of the earliest phase would be significant.</p> <p>In the situation where community infrastructure can't be afforded early on in the development, then less costly yet thorough interim arrangements need to ensure the needs of the earliest occupiers are met. These will often be those who have the greatest needs and support and as such flexible and pragmatic solutions need to be thought of in early discussions regarding phasing.</p>
<p>20. The distribution of affordable housing groups in developments needs to take into account that they may be developed in advance of the private housing (given funding constraints and the pressing need for such housing in the area) which may influence where they are located on a site to enable access to services and for future construction traffic, whilst minimising their concentration into one part of a site. Consideration needs to be given to the provision of temporary facilities and accesses, a good management regime that keeps the site tidy, and measures such as the interim landscaping of unsightly areas, although these will have cost implications.</p>	<p>This is an issue that needs to be considered at a strategic level. The City Council's Affordable Housing SPD requires affordable housing to be clustered in groups to avoid concentrations of affordable housing in specific parts of the site. However, in the current economic context, this could potentially result in affordable housing coming forward in advance of the market housing. Given the pressing need for affordable housing, it is considered that it would be difficult to prohibit the affordable housing to be provided in advance of the market housing. Therefore each development needs a strategy to address this, to ensure that consideration is given to the provision of temporary facilities and accesses, interim landscaping of unsightly areas etc.</p> <p>Further detailed consideration needs to be given to this issue at a strategic level as it goes beyond the planning process.</p> <p>However, it should also be noted that the affordable housing clusters secured at Orchard Park are bigger than those being required for the Fringe Sites.</p>
<p>21. To prevent the delay in the provision of community facilities, strong monitoring of the S106 is required and stricter enforcement action may be necessary. Consider</p>	<p>The City Council already has strong S106 monitoring processes in place and has a</p>

the need for a S106 monitoring officer.	<p>long-established S106 database that records triggers for payments etc.</p> <p>As a response to the growth area developments, further improvements to existing monitoring systems, are being progressed through a Joint City/SCDC/County S106 monitoring project being funded by Cambridgeshire Horizons. In addition, all the Southern Fringe S106 agreements include provisions for S106 monitoring contributions.</p> <p>However, where local authorities are responsible for delivering facilities (e.g. Trumpington Meadows primary school/community facility, Clay Farm community facilities), rather than the developer, processes will need to be reviewed and refined to ensure that relevant services are also geared up to deliver facilities to the required deadline. This will require a higher level of corporate project management.</p>
22. Consider if there should be some flexibility in the S106 agreement in terms of the finer details, and consider simplifying the process involved in handing over facilities.	<p>For the Southern Fringe S106 agreements in terms of open space facilities, strategic specifications will be attached to the agreements, with more detailed specifications to be submitted at detailed application/Reserved Matters stage, secured by condition. This will establish a clear process in terms of setting out the principles of what is required at outline stage but allowing for further flexibility on details.</p> <p>A 12 month handover process is fairly standard. However, in order to ensure the process is as smooth as possible for Southern fringe, a remedy of deflect process is included as part of the S106 agreements.</p>
23. Consider negotiating a capital sum and site size for community facilities in the S106 agreement and then the local authority can take control of procurement and build. This also ensures flexibility of design and community involvement.	<p>On Clay Farm, the local authorities are now negotiating a capital sum and land and will be responsible for procuring the facilities themselves.</p> <p>However, this approach does</p>

	<p>have resource implications for those services that will be responsible for this. Again, an increased level of corporate project management will be required to oversee large-scale and often complex projects.</p>
<p>24. It would be useful to provide basic facilities such as a post box early in the development.</p>	<p>Post boxes are provided by Royal Mail but this could be an issue that is progressed by the liaison group once set up for individual Fringe sites.</p>
<p>25. Consider whether it would be possible to have a viability back-up plan, and what form this would take. In practice, this may relate to having review stages in the event of an economic downturn, and building in flexibility for introducing different land uses or intermediate/temporary uses.</p>	<p>The growth area S106 agreements developed so far are already extremely complex and there is a need to avoid further complication where possible. Review mechanisms in S106 agreements are a fairly recently developed tool and there are only a small number of precedents in the public domain. However, the issue of review mechanisms is currently being explored through the Clay Farm S106 process. Further legal advice on the approach is also being sought.</p> <p>Most temporary uses would require planning permission in themselves and each would need to be considered on its merits.</p>
<p>26. Design Guidance, if it is to be used in future developments as a tool, (Design and Access Statements, Design Codes and other tools have somewhat superseded this need) must be developed and approved earlier in the process, before it is needed to assess the first detailed or reserved matter applications.</p>	<p>All the urban extension developments will be subject to Design Codes or alternative appropriate design review mechanisms.</p> <p>The wording of the design code conditions attached to the Fringe Sites developments requires the design codes to be submitted prior to or concurrently with the first reserved matters submission.</p>
<p>27. A Design Panel should be arranged early on in the review process with appropriate administration support and have real status in the planning process.</p>	<p>A proposal for a Quality Panel for all the major Cambridge and South Cambridgeshire sites has recently been reported to the Joint Strategic Growth Implementation Committee (JSGIC) and is currently under review by Members.</p>
<p>28. Early engagement with the Joint Urban Design Team is critical to help avoid poor quality submissions.</p>	<p>Urban Design officers have been involved as part of the core project teams in the Southern Fringe and NIAB development application processes, from the earliest masterplanning stages</p>

	and have been/will be leading on the Design Code processes in due course.
29. Any 'Development Frameworks' need to be robust but flexible, and to be supplemented by more detailed design guidance such as design codes. Current practice requires submission of a Design and Access Statement. The City Council now requires submission of a Design Code to implement the Design and Access Statement.	Design codes are currently being developed for Clay Farm and NIAB and will soon be developed for Trumpington Meadows and later for Bell School, NW Cambridge and Cambridge East.
30. The retention of the 'masterplanner' should be encouraged throughout the life of the development in order to ensure consistency, or complementarity, of design across the scheme.	An informative to this effect has been added to the Southern Fringe draft planning permissions. This cannot be insisted on legally.
31. Ensure effective communication by setting up relevant liaison groups at an early stage. These should include all parties, including the individual builders and RSLs on site. The Delivery Boards should fulfil this function at an agency level. It is important that this is complemented by a more local member/resident group like OPAG.	This can be taken on board as soon as any of the S106 agreements are signed, permissions issued and it is clear that development is planned to commence on any of the sites.
32. Consider use of Welcome Packs, and a newsletter to be sent to new residents and existing residents who are affected by a development, to keep them informed about progress and where there are any opportunities for them to be involved.	This can be taken on board.
33. Good governance arrangements are important. It will be particularly important to consider governance arrangements at an early stage where a site crosses the boundary between Cambridge City and SCDC, with its Parish Councils.	On Trumpington Meadows the first part of the site to be developed is within the City and it is likely that the boundary review will have taken place prior to any houses being built within the SCDC part of the site, given the significantly slowed-down development trajectory.
34. The need for some form of community provision from when the first residents move in – this could be temporary use of one of the houses. However, this needs to be carefully considered, as it would have implications for the S106 package.	<p>Community houses have cost implications that need to be addressed before pursuing this as an option. It was proved not possible to pursue this on the Bell School development and instead a decision was taken to develop improvements to existing provision.</p> <p>Further discussions are required with key partners such as RSLs and Cambridgeshire Horizons and Community Services officers to consider how funding for such facilities could be achieved.</p> <p>In the situation where community infrastructure can't be afforded early on in the development, then less costly yet thorough interim arrangements need to ensure the</p>

	<p>needs of the earliest occupiers are met. These will often be those who have the greatest needs and support and as such flexible and pragmatic solutions need to be thought of in early discussions regarding phasing.</p>
<p>35. The detailed design of community facilities is very important i.e. separate access to community facilities from school, ceiling heights in community centre prevent sports use. The Joint Urban Design Team and the County are currently working together on school design.</p>	<p>Services responsible for checking facilities are completed in accordance with specifications need to have access to surveying expertise etc to ensure building/construction defects are picked up at the earliest stage.</p> <p>A joint technical officer for community facilities is now employed by SCDC and the City Council. This officer has a Quantity Surveying background to ensure community facility specifications and costs are appropriate.</p> <p>The Joint Urban Design Team is currently working with the County Council on school design, particularly in relation to the expansion of the Fawcett School and the new primary school at Trumpington Meadows in the Southern Fringe.</p>
<p>36. Community Development Officer, Youth Worker and Neighbourhood Artist are very useful roles in helping to build a successful community. The length of time these roles are provided for needs to be considered carefully in the S106 agreement.</p>	<p>These are being secured for the Fringe Site developments. However, Circular 05/2005 states that such requirements can only be sought for an initial limited period, until local authority revenue funding streams can take them on board.</p> <p>Overall viability implications on the Southern Fringe developments reduced the 5 year period sought to 3 years.</p> <p>Community Development Officers, Youth Workers and Neighbourhood Artists should have a run-up period built into the S106 prior to first occupation to enable them to hit the ground running once residents move in to new developments.</p>
<p>37. The requirements of faith groups need to be taken into account at an early stage in order to identify if any provision needs to be sought.</p>	<p>Consideration was given to provision for faith groups as part of the Clay Faith community</p>

	<p>facilities process.</p> <p>On North West, this will be taken forward as part of the University development process.</p>
Climate	
<p>38. Incentives alone may not be enough to encourage developers to incorporate higher sustainability standards. Therefore it is essential that strong climate change mitigation and adaptation policies are developed as part of the Local Development Framework. Policies should set specific targets as far as it is reasonable to do so. They should also be future proofed as far as possible, for rising standards over time, especially for large sites with long build out periods, so that they do not become rapidly out of date.</p>	<p>Where new standards are being developed, such as those proposed at North West Cambridge, the highest viable standards have been pursued, supported by a detailed evidence base. Targets have also been developed to rise over time as the norm moves on. A similar approach is being developed with policies in the LDF.</p> <p>Conditions for the Southern Fringe and CB1 have been considered to require developers to meet higher standards for later phases, once LDF policies are in place. Consideration is also being given to how to tie any Housing Growth Fund (HGF) funding to more demanding sustainability standards.</p>
<p>39. Seek to identify strategic barriers to delivering policy aims, such as the adoption of SUDS, as early as possible and work jointly with other authorities to deliver better outcomes at lower cost.</p>	<p>Closer working with SCDC and Horizons is helping to anticipate barriers and jointly overcome them. Plans are to raise issues at member briefings whilst in pre-application discussions to assist this process.</p>
Character	
<p>40. Ensure a more consistent approach to building design through the facilitation of closer design working between the Council, developer and house builders. A more detailed design code or guide should be produced to help guide all involved and a Design Panel should be created very early on to help support Planning Officers and the Joint Urban Design Team in its role in ensuring a high quality of design and consistent approaches across the entire site.</p>	<p>These approaches are being followed for all sites. Design codes are currently being developed for Clay Farm and NIAB and will soon be developed for Trumpington Meadows and later for Bell School, NW Cambridge and Cambridge East.</p> <p>A proposal for a Quality Panel for all the major Cambridge and South Cambridgeshire sites has recently been reported to the Joint Strategic Growth Implementation Committee (JSGIC) and is currently under review by Members.</p>
<p>41. Proactive monitoring and enforcement is important to ensure that a development is built according to the approved plans. The use of S106 money to employ a Clerk of Works on site should be considered to ensure quality of build.</p>	<p>The City Council already has effective S106 monitoring and enforcement processes in place including a S106 database. A specific joint growth area S106 database is currently being developed.</p>

	<p>S106 monitoring contributions are being secured for all the Fringe sites developments. These will provide for additional S106 monitoring resources for the growth area developments.</p> <p>It is too late to employ a Clerk of Works for Southern Fringe or NIAB. However, a portion of the S106 monitoring contributions could be allocated to this type of function, albeit that there will be a lot of monitoring demands on the funding secured so it is unlikely to cover the cost in full.</p>
42. It is useful to have a snagging list / issues log so that people know where to register any problems and these can be addressed by the responsible organisation. This could be managed by the Clerk of Works, if one was employed.	This will be coordinated by the S106 monitoring officers on the Southern Fringe and NIAB.

Issues Relating to Transfer of Orchard Park to the City Council

7.3 If the boundary change is successful and Orchard Park is transferred to the City Council the following issues will need to be addressed:

- Uncertainty as to whether the Community Council will continue to exist as the City Council does not have a system of Parish Councils.
- Uncertainty as to whether the City Council will want to / be able to take on community facilities if the Community Council disbands. This would include the community buildings and open space (including children and teenager play space, and sports pitches).
- Any noise issues and complaints from residents associated with the current road and the impact of the widened A14 would fall to Environmental Services. Environmental Services would be able to do little other than offer advice about noise insulation to residents in this case. It is extremely likely that when this section of the A14 is widened that noise levels will increase, although mitigation measures should help to reduce the impact.
- Increased costs from taking on part of the A14 Air Quality Management Area, including provision and maintenance of new monitoring equipment. The City Council would be under a duty to improve the air quality, or face possible financial penalties. Taking on this AQMA would be a new area of work, dealing with PM10 monitoring and liaising with the Highways Agency.

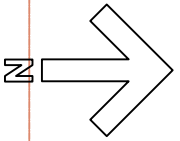
List of Contributors

Carly Meagher	Bedford Pilgrims Housing Association
Cllr Clare Blair	Cambridge City Councillor
David Bradford	Cambridge City Council, Cycling & Walking Development & Promotion Officer
Clare Rankin	Cambridge City Council, Cycling & Walking Development & Promotion Officer
Selwyn Anderson	Cambridge City Council, Environmental Health Manager
Julian Adams	Cambridge City Council, Growth Projects Officer
Debbie Kay	Cambridge City Council, Head of Active Communities
Sharon Brown	Cambridge City Council, Major Development Manager
Sally Roden	Cambridge City Council, Neighbourhood Community Development Manager
Jo Dicks	Cambridge City Council, Principal Scientific Officer
Eithne Flanagan	Cambridge City Council, Sustainable Construction Coordinator
Bob Menzies	Cambridgeshire County Council, Head of Delivery for the Guided Bus
Ian Dyer	Cambridgeshire County Council, Principal Engineer
Joseph Whelan	Cambridgeshire County Council, Head of Service for New Communities
Martin Lucas-Smith	Cambridge Cycling Campaign, Co-ordinator
Chris Dorling	Cambridge Cycling Campaign
Vanessa Kelly	Cambridge Cycling Campaign
Steve Riley	Gallagher UK, Engineering Director

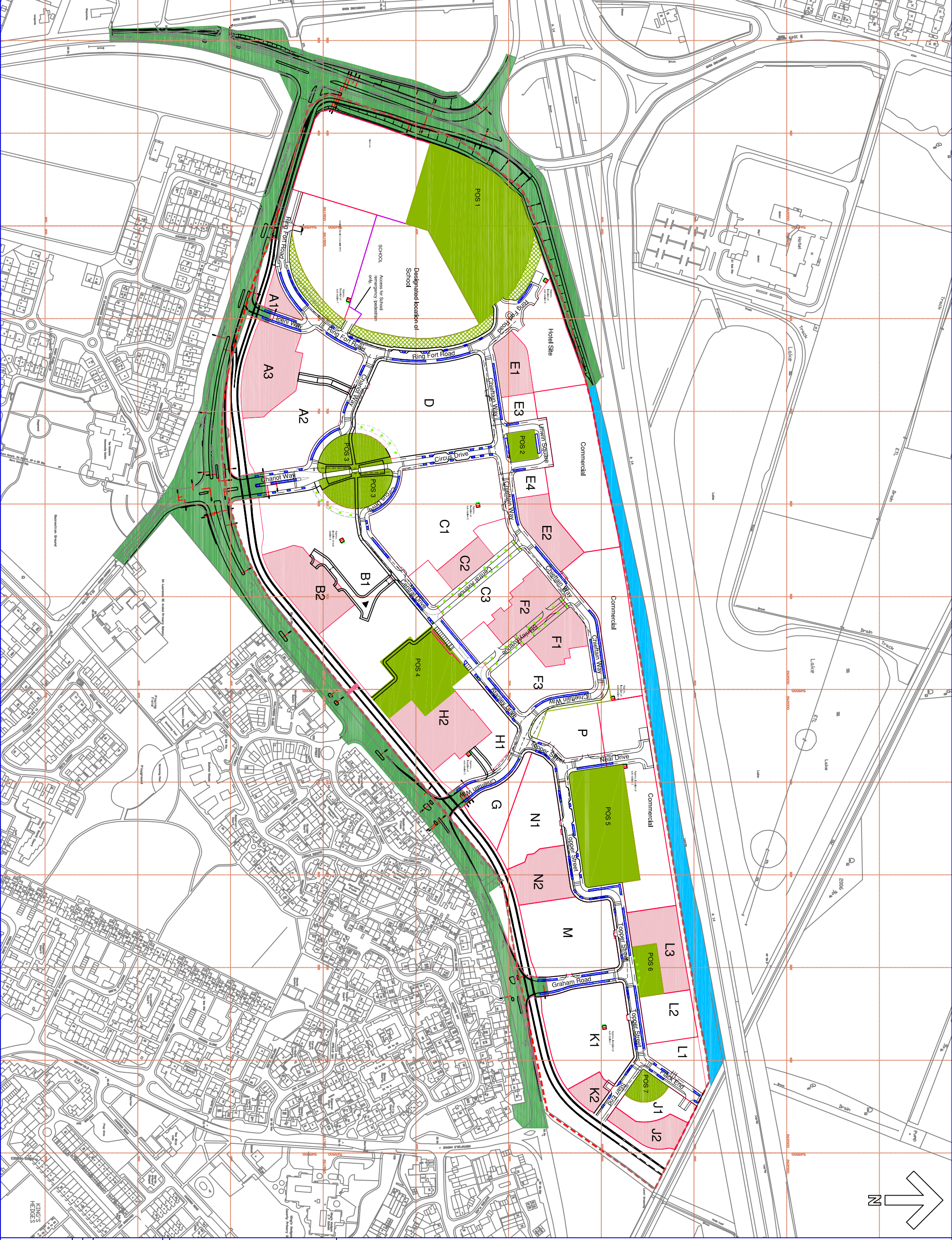
Greg Mitchell	Gallagher UK, Planning Director
Cllr Mike Mason	South Cambridgeshire District Councillor for Histon and Impington
Kirsty Human	South Cambridgeshire District Council, Corporate Projects Officer
Jo Mills	South Cambridgeshire District Council, Corporate Manager for New Communities
Jane Thompson	South Cambridgeshire District Council, Cultural Services Manager
Greg Kearney	South Cambridgeshire District Council, Environmental Health
Jane Green	South Cambridgeshire District Council, Major Developments Manager
John Pym	South Cambridgeshire District Council, Senior Planning Officer

Appendix 2: Map of Orchard Park

1:1000 Scale Drawing of the proposed site layout. The drawing is a conceptual plan and does not represent a final design. It is intended for use as a reference only and should not be used for construction purposes. The drawing is the property of Gallacher Estates and is not to be reproduced without written permission.



- Proposed Land Parcels
- Affordable Housing
- Proposed Onsite Works
- Proposed A14 Embankment Works
- Abury camp Ditch and POS Areas



REV	DATE	DESCRIPTION
1	01/01/2004	Initial site layout
2	01/01/2004	Revised site layout
3	01/01/2004	Final site layout

Abury Camp, Cambridge

Concept Site Layout

GALLACHER
ESTATES
Gallacher Estates, 11 Newbury Green,
Tel: 0151-728 8788 Fax: 0151-728 8787,
E-mail: marketing@gallacher.co.uk

Appendix 3: Personal Travel Planning Report for Orchard Park



Arbury Park
Personal Travel Planning Pilot Project

**Evaluation Report
November 2008**

Final Version 1.2

Produced by:

Integrated Transport Planning Ltd
43 Temple Row
Birmingham
B2 5LS

Tel: 0121 230 1701
Fax: 0121 237 6100
Contact: Jim Bradley

Email: bradley@itpworld.net

www.itpworld.net

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Appendix A: After Survey Questionnaire

Appendix B: Telephone Interview Topic Guide

EXECUTIVE SUMMARY

This report details the evaluation of a personalised travel planning (PTP) behavioural change pilot project for Arbury Park, a new mixed use development located to the northern edge of Cambridge delivered by consultants WSP on behalf of Cambridgeshire County Council, South Cambridgeshire District Council and the Highways Agency in July and August 2008.

The main objective of the evaluation was to measure the effectiveness of the pilot intervention in promoting a change in residents' travel behaviour and attitudes with the focus upon achieving shifts towards and preferences for sustainable travel modes. The approach taken follows DfT best practice guidance for 'light touch' evaluations where resources are limited and provides an indication of behavioural change from a representative but limited sample of participants. The evaluation therefore provides an insight into the likely impact of the Travel Choice Arbury Park intervention *without seeking to produce statistically significant results*.

The evaluation activity involved baseline (June and July 2008) and after surveys (September 2008) of residents' travel behaviour supplemented by a small number of qualitative interviews (October 2008). The baseline survey collected information relating to two main journeys made at the time of the contact by each participant including the journey purpose and main modes of travel used for these journeys. The after survey methodology involved a simplified self completion survey asking some basic questions as to whether residents travel more or less by each mode as a result of the intervention and also to measure attitudes to the mechanics of the programme to inform the adaptive learning process.

Results

The headline results of the evaluation are:

- 65% of all occupied households (200 households) at the time of the intervention agreed to participate in the Travel Choice Arbury Park pilot project.
- Of the 200 participant households 43% completed an after survey for the purposes of the evaluation.
- 99% of all respondents remembered the initial door step conversation with the travel advisor about the Travel Choice Arbury Park pilot.
- 96% found the conversation useful in assisting them to think about different ways of travelling to and from Arbury Park.
- 74% of respondents to the after survey indicated that they tried out the bus during the project, 48% of participants tried walking, 40% cycling, 14% on line shopping, 10% car sharing and 2% the train. 62% of respondents actually trialled a combination of these modes during the project.
- 64% of respondents to the after survey indicated that they tried out a sustainable travel mode (or combination of modes) during the project for the purposes of shopping, 53% for leisure purposes and 52% for work journeys (52%). In addition 14% of respondents trialled a sustainable mode for journeys to school.
- 93% of participants requested some form of bus information during the project, 66% requested cycling information and 26% requested information on car sharing and/or local facilities.
- 84% of respondents rated the information provided by the travel advisors at 7 or above out of 10, with an overall mean average rating of 7.96.
- 58% of respondents indicated that they have increased the number of trips they make by bus as a result of the project, 42% of respondents indicated they have increased the

number of trips they make on foot and 39% of respondents indicated they have increased the number of trips they make by bicycle.

- As a result 35% of respondents indicated that they have reduced the number of trips they make by car as a driver without passengers.

Conclusions and Recommendations

The indications are that the pilot project has been successful in terms of raising awareness of sustainable travel modes, encouraging participation in the PTP process, increasing the sustainable travel choices made by residents of Arbury Park and providing valuable feedback on local infrastructure barriers.

Based on the broad findings from the evaluation, it would appear that the key performance indicator of encouraging a 15% increase in the use of sustainable modes is likely to have been well exceeded. However, the limitations of the evaluation approach clearly preclude us from drawing these conclusions with any degree of statistical confidence.

The following points should be noted with respect to the Arbury Park PTP experience:

- One of the reasons for the success of the pilot project was its timing with respect to the occupation of the Arbury Park development. The indication is that by providing information and incentives to residents as they move to the area and are in the process of establishing their travel patterns is a very effective way of prompting a change in habitual travel behaviour.
- The provision of Megarider vouchers to virtually all households who actively took part in the intervention appears to have had the strongest impact in prompting the greatest increase in usage of any of the sustainable travel modes.
- The existing Citi bus service offer could be improved by diverting these services through Arbury Park. In addition, improvements could be made to the sequencing of the traffic lights at the junctions of the development with the main road network to facilitate cycling and also in improving the pedestrian signage on the main routes into the city.
- It would be useful to undertake a follow up survey 6-12 months following the intervention to measure any longer term impact of the intervention on habitual travel behaviour.

1 INTRODUCTION

- 1.1 This report details the evaluation of a personalised travel planning (PTP) behavioural change pilot project for Arbury Park, a new mixed use development located to the northern edge of Cambridge close to the established residential areas of Arbury and Kings Hedges.
- 1.2 The 'Travel Choice Arbury Park' PTP intervention was delivered by consultants WSP on behalf of Cambridgeshire County Council, South Cambridgeshire District Council and the Highways Agency in July and August 2008. 308 of the planned 904 residences on Arbury Park were occupied at this time and targeted for the purposes of the intervention. The aim of the intervention was to encourage a positive change in behaviour and attitudes (towards sustainable travel modes) amongst new residents.
- 1.3 This evaluation provides two functions: firstly to provide feedback on the overall effectiveness of the process, and secondly, to inform modifications to the design of future PTP projects (adaptive learning). The evaluation activity (undertaken by ITP) was separated from the PTP intervention to ensure independence of findings and involved baseline (June and July 2008) and after surveys (September 2008) of residents' travel behaviour supplemented by a small number of qualitative interviews (October 2008).

Background to PTP and the Travel Choice Arbury Park Pilot Project

- 1.4 Personal Travel Planning (PTP) is a technique that delivers information, incentives and motivation to individuals to help them voluntarily make sustainable travel choices. It seeks to overcome habitual use of the car, enabling more journeys to be made on foot, bike, bus, train or in shared cars. PTP is typically delivered across large residential areas. Each person within the targeted area is encouraged to think about how they currently travel for each of the trips they make, and to consider how they might make those trips in more sustainable ways. PTP has been implemented overseas since the 1980s (most notably in Australia, where it has now become a mainstream transport planning activity) and was first introduced in the UK in the late 1990s. Within the UK, PTP has been reported to typically reduce car driver trips by 10% (amongst the targeted population) and reduce the distance travelled by car by 11%¹. As a result of, and in addition to, reduced car use successful PTP projects also deliver:
 - ❑ Increased walking and cycling, with associated health benefits;
 - ❑ Increased public transport use, helping to make services more feasible and profitable;
 - ❑ Increased viability of local shops and businesses;
 - ❑ More sociable and 'liveable' neighbourhoods;
 - ❑ Stronger partnerships between the agencies and organisations involved; and

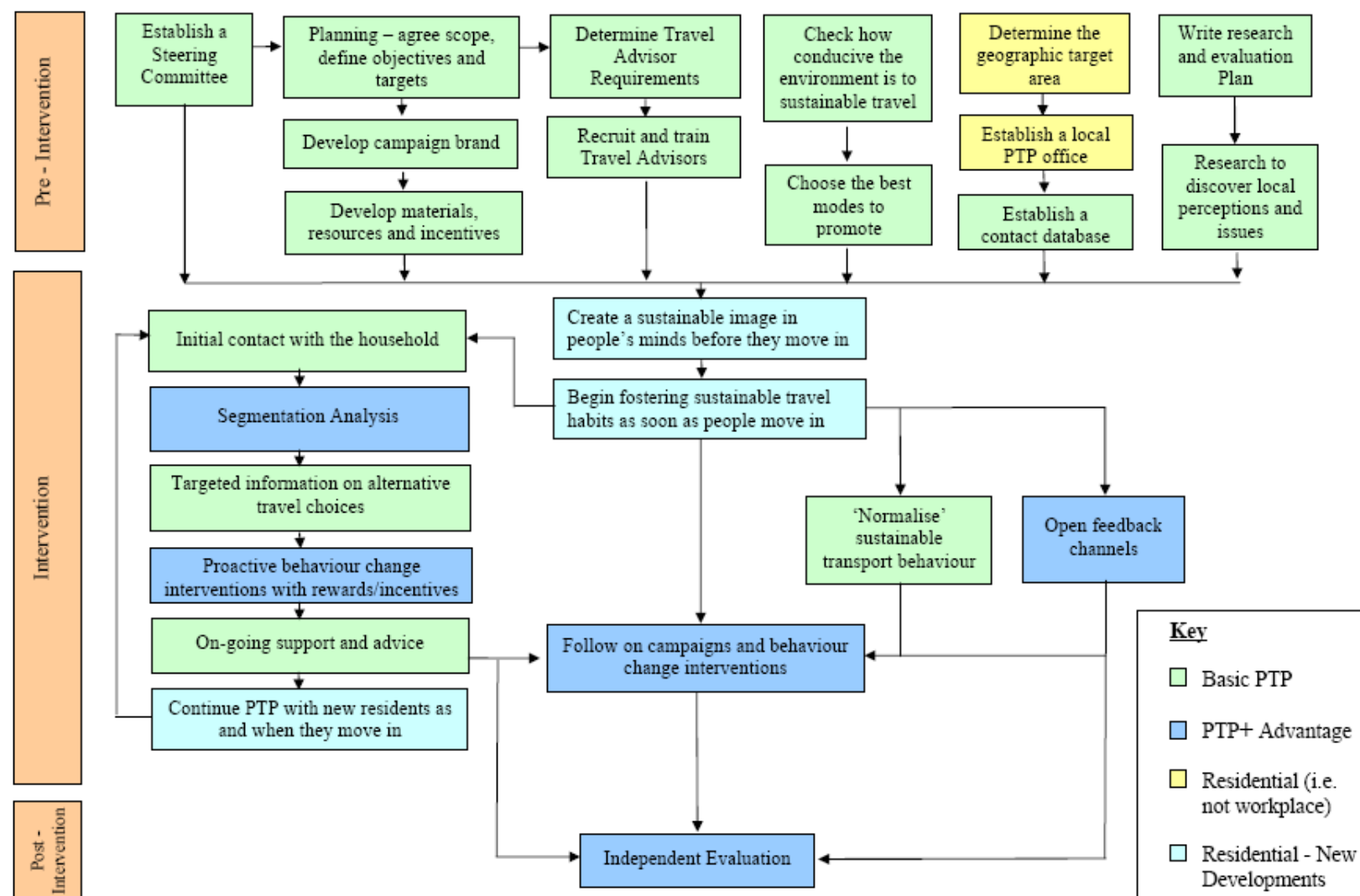
¹ DfT Research Report 'Making Personal Travel Planning Work', 2007.

- Improved local air quality and a reduction in carbon emissions.

1.5 WSP's methodology for the Travel Choice Arbury Park Project was based on their PTP+ approach tailored to the requirements of new residential developments. Figure 1.1 on the following page summarises the three phases (pre-intervention, intervention and post intervention) of the PTP+ approach for residential developments. In the case of the Travel Choice Arbury Park Project the intervention phase consisted of the following key stages:

- a) Introductory letter. The first stage of the intervention involved the delivery of an introductory letter inviting all occupied households to participate, sent within a week of the agreed commencement date of the active intervention. The letter also informed all households that a travel advisor would be visiting them in the coming days.
- b) Contact with householders. Initial contact was then made by a team of travel advisors going door to door. Three attempts were made to contact households involving a week day time visit, a week day evening visit and a weekend day time visit. At this stage residents that could not be contacted were recorded as non-participants. A letter or compliments slip was however posted to them saying that the travel advisors had failed to make contact with them but highlighting the benefits of participation and outlining ways and means for opting back into the scheme. The on the doorstep conversation between the travel advisor and the householder enabled segmentation of the audience (based on a brief survey of current journeys made and modes used) and determination of the most suitable incentives and materials to meet the needs of the householder. The conversation concluded with a 'contract' being made between the advisor and the householder, with the former agreeing to deliver a tailored information pack and appropriate incentives (including prize draws) and the latter agreeing to trial a sustainable travel mode (either walking, cycling, bus (Stagecoach Citi 1, 4, 7 or the Whippet Arbury Circular (14) service), train, car sharing or online shopping. In each case a house visit record sheet of all information gathered and requested was compiled by the travel advisor which was fed into WSP's database.
- c) Delivery of information packs. A tailored package of information materials (bus maps and timetables, information on bus concessions, information on cycling including cycle training and maps, information on car sharing and local facilities) and where applicable rewards/vouchers (a Megarider voucher, cycle skills training voucher and/or personal travel plan were on offer) were then provided to each household, tailored to their requirements, based on the doorstep conversation. The tailored package was delivered by the travel advisor (wherever possible, the same one that spoke to the household at the initial engagement visit). The purpose was to signpost the contents of the pack, where required. If the householders were not at home, then the pack was posted through the door.
- d) Trialling of sustainable travel modes. Once incentivised and provided with relevant information, householders were therefore encouraged to trial sustainable travel modes during July and August, supplemented by ongoing support and advice where required.

Figure 1-1: PTP+ Approach



1.6 The post intervention phase of the project involved the independent evaluation of the intervention and was undertaken by ITP. Details of the evaluation of the Travel Choice Arbury Park intervention are provided in the remainder of this document as follows:

- ❑ Chapter 2 sets out the evaluation methodology;
- ❑ Chapter 3 details the findings of the evaluation comprising a set of performance statistics on the outputs from the project, and the results of the baseline and after surveys of participants qualified by a small number of qualitative telephone interviews; and
- ❑ Chapter 4 draws conclusions from the findings highlighted in Chapter 3 to assess the overall effectiveness of the project in achieving its objectives and making recommendations for adaptive learning where appropriate.

2 EVALUATION METHODOLOGY

- 2.1 The main objective of the evaluation was to measure the effectiveness of the pilot intervention in promoting a change in residents' travel behaviour and attitudes with the focus upon achieving shifts towards and preferences for sustainable travel modes. The approach taken follows DfT best practice guidance for 'light touch' evaluations where resources are limited. As such, the evaluation is structured to provide an insight into the likely impact of the Travel Choice Arbury Park intervention without seeking to produce statistically significant results. The evaluation therefore provides an indication of behavioural change from a representative but limited sample of participants (only a proportion of the 308 households occupied at the time of the pilot participated in both the intervention and evaluation surveys).
- 2.2 The evaluation methodology involved baseline and after surveys of residents' travel behaviour supplemented by a small number of qualitative interviews². In order to understand the baseline travel patterns and behaviour of residents at Arbury Park the travel advisors undertook a brief 'travel survey' embedded within the initial contact. Although this survey took place through the initial doorstep approach it was clearly separated from the intervention by taking place prior to any mention of the PTP programme so as to avoid influencing the respondents. The baseline survey collected basic information relating to two main journeys made at the time of the contact by each participant including the journey purpose and main modes of travel used for these journeys. Information on journey lengths was not collected by the baseline survey.
- 2.3 Best practice PTP evaluation advice³ suggests that travel surveys can only provide reliable and valid results when sufficient attention is paid to achieving good response rates. Due to the likely low response rates obtained through self completion travel diary surveys (typically 25% without significant follow up) it was questionable whether a representative sample of participants could be achieved for the evaluation using this approach and that any meaningful change in behaviour could be deduced as a result. The 'after survey' methodology therefore involved a simplified survey asking some basic questions as to whether residents travel more or less by each mode as a result of the intervention (see the after survey questionnaire in Appendix A) and also to measure attitudes to the mechanics of the programme to inform the adaptive learning process. The survey instrument was a self completion mail back questionnaire distributed by hand and supplemented by a collection undertaken by the travel advisors. The survey took place between 8th and 30th September 2008 and a prize draw incentive of £50 worth of M&S vouchers was offered to respondents.
- 2.4 In addition 20 short telephone interviews were undertaken by ITP consultants in mid October 2008 with representatives of the PTP pilot group to supplement any behavioural change data collected through the after survey and to further inform the adaptive learning process. Appendix B details the topic guide followed in undertaking these telephone interviews.

² It was initially intended to corroborate the behavioural change data gathered through the survey with any available bus passenger / cycle count data for the main routes serving Arbury Park development. Unfortunately Stagecoach were not able to provide any relevant data of this type to inform the evaluation.

³ DfT Research Report 'Making Personal Travel Planning Work', 2007.

3 EVALUATION RESULTS

Performance Statistics

- 3.1 Tables 3-1 to 3-3 below highlight the headline performance statistics detailing the outputs from the Travel Choice Arbury Park PTP pilot in relation to the delivery of the intervention⁴. Table 3-1 shows that of the 308 households occupied at the time of the intervention 274 (89%) were contacted by a travel advisor within the three visits allocated by the PTP+ approach. Of the 274 households contacted by a travel advisor 200 (73%) agreed to participate in the intervention. This equates to 65% of all the occupied households at the time of the intervention being contacted and agreeing to participate.

Table 3-1: Number of households contacted and participating in the intervention

Number of households occupied	Households contacted by a travel advisor		Households participating in the intervention	
308	<i>Frequency</i>	<i>% of total occupied</i>	<i>Frequency</i>	<i>% of total contacted</i>
	274	89	200	73

- 3.2 Table 3-2 details the information provided to the participants by the travel advisors. 94% of participants requested bus information (bus maps, timetables or information on bus concessions), 74% requested cycling information (cycle maps, information on the benefits of cycling and information on cycle training) and 21% requested information on car sharing and local facilities.

Table 3-2: Information provided to participants by the travel advisors

Households participating in the intervention	Bus maps/ timetables/ concessions		Cycle maps & benefits/ training information		Car Sharing & local facilities	
200	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>
	187	94	147	74	41	21

- 3.3 Table 3-3 highlights the uptake of different kinds of incentives promoted by the travel advisors. 93% of participants were provided with weekly Megarider vouchers providing free bus travel for up to a month in total (4 vouchers were provided per household), 15% of participants were provided with cycle training vouchers and 3% were provided with personalised travel plans by the travel advisors.

⁴ It should be noted that the data in Tables 3-1 to 3-3 is based on information supplied by WSP from their database. These outputs were therefore not measured independently of the intervention although elements of Table 3-2 were evaluated separately by the after survey and are validated in the relevant section of this report.

Table 3-3: Uptake of incentives promoted by the travel advisors

Households participating in the intervention	Megarider voucher		Cycle training voucher		Personalised travel plan	
200	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>	<i>Freq</i>	<i>%</i>
	185	93	29	15	6	3

- 3.4 Table 3-4 highlights the response to the evaluation, detailing response rates to the self completion after survey and the potential sample for the follow up qualitative telephone interviews. Of the 200 participant households, 86 (43%) completed an after survey for the purposes of the evaluation. Of the 86 households who completed an after survey, 39 (45%) indicated a willingness to take part in a follow up interview, with just over half of these households (20) selected at random to take part in the qualitative interviews.

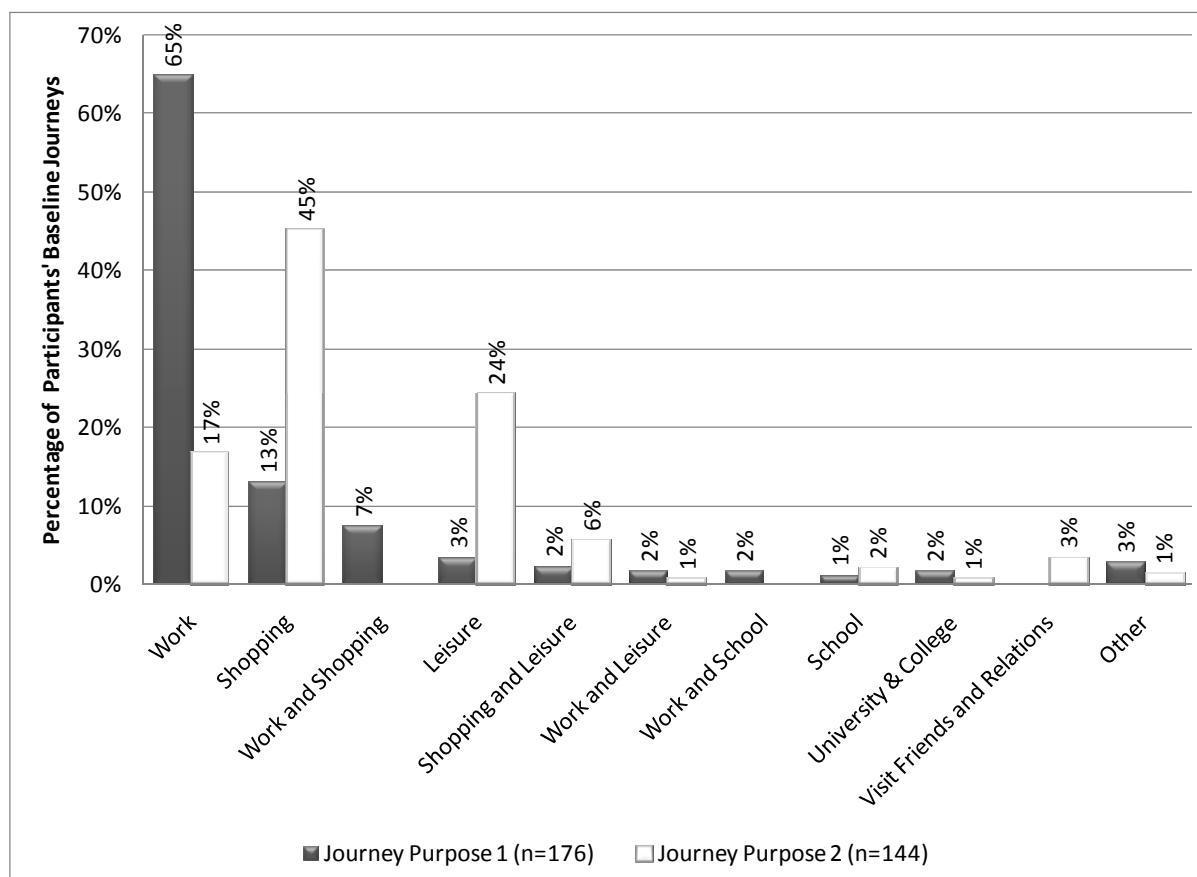
Table 3-4: Response to the Arbury Park PTP Pilot Project Evaluation

Households participating in the intervention	Response to the after survey		Households willing to take part in a telephone interview	
200	<i>Frequency</i>	<i>% of total participating</i>	<i>Frequency</i>	<i>% of survey respondents</i>
	86	43%	39 (20 took part)	45% (23% took part)

Baseline Survey Results

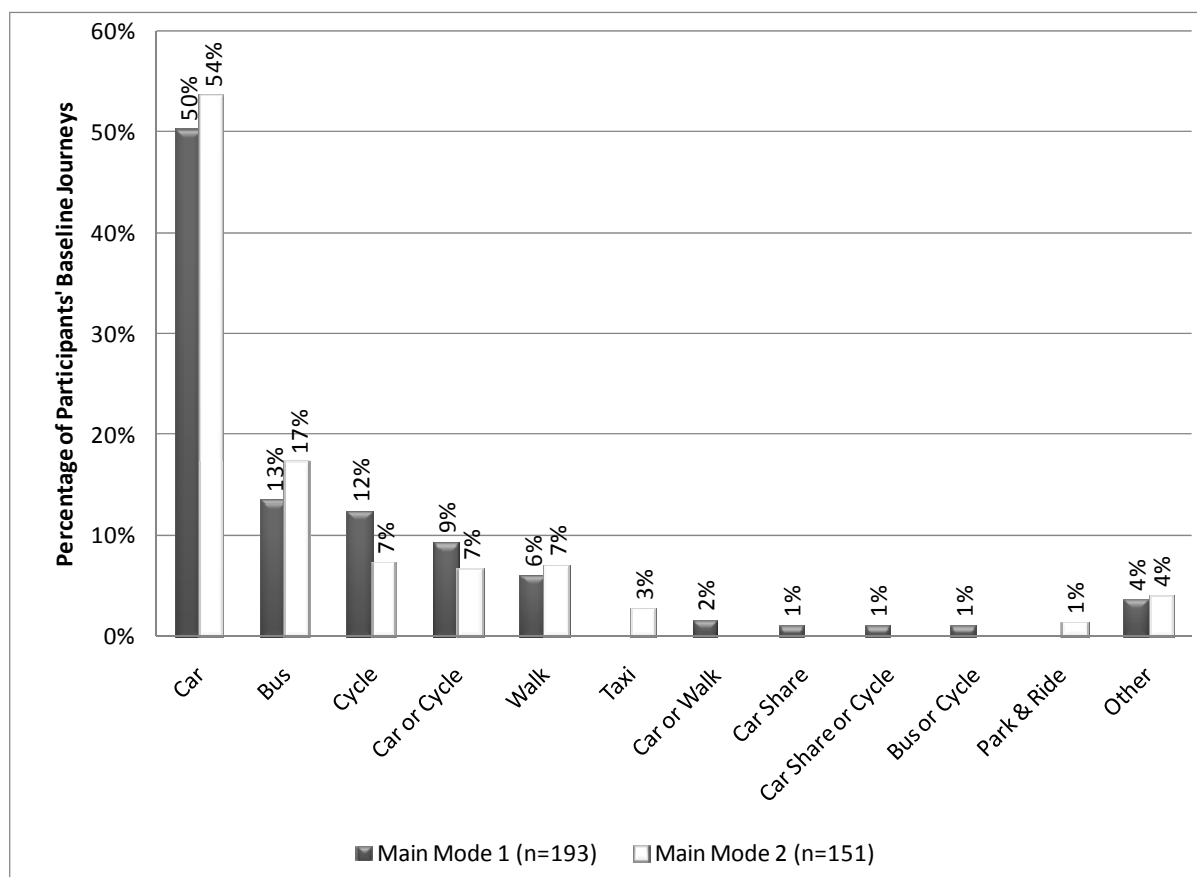
- 3.5 Figures 3.1 to 3.4 detail the results of the brief baseline survey undertaken by the travel advisors in order to indicate the main travel patterns of participants and those travel modes they most commonly used prior to the trialling of sustainable modes through the intervention. The information collected through this process relates to the two most common journeys (primary and secondary) made by individual participants in the survey and the main modes of travel used for these two journey purposes.
- 3.6 Figure 3.1 shows that the main journey purposes of the participants are for work, shopping and leisure journeys. 65% of all primary baseline journeys and 17% of all secondary baseline journeys made by individual participants were for work purposes, 13% of all primary baseline journeys and 45% of all secondary baseline journeys recorded were undertaken for shopping purposes and 3% of all primary and 24% of all secondary baseline journeys recorded were undertaken for leisure purposes.
- 3.7 In addition, 7% of all primary baseline journeys recorded were undertaken for combined work and shopping purposes and 6% of all secondary baseline journeys recorded were for shopping and leisure purposes.

Figure 3-1: Main journey purposes of participants



3.8 Figure 3.2 shows that prior to the intervention the main mode of travel used by participants was the car. 50% of all primary baseline journeys and 54% of all secondary baseline journeys recorded for participants were undertaken by car. An additional 9% of all primary baseline journeys and 7% of all secondary baseline journeys recorded were undertaken by car or cycle and a further 2% of all primary baseline journeys recorded were undertaken by car or walking.

3.9 Prior to the intervention the next most popular modes of travel used by participants for their two main journey purposes were bus, cycling and walking. 13% of all primary baseline journeys and 17% of all secondary baseline journeys recorded were undertaken by bus, 12% of all primary baseline journeys and 7% of all secondary baseline journeys recorded were undertaken by bicycle and 6% of all primary baseline journeys and 7% of all secondary baseline journeys recorded were made on foot. In addition, 3% of all secondary baseline journeys recorded were made by taxi.

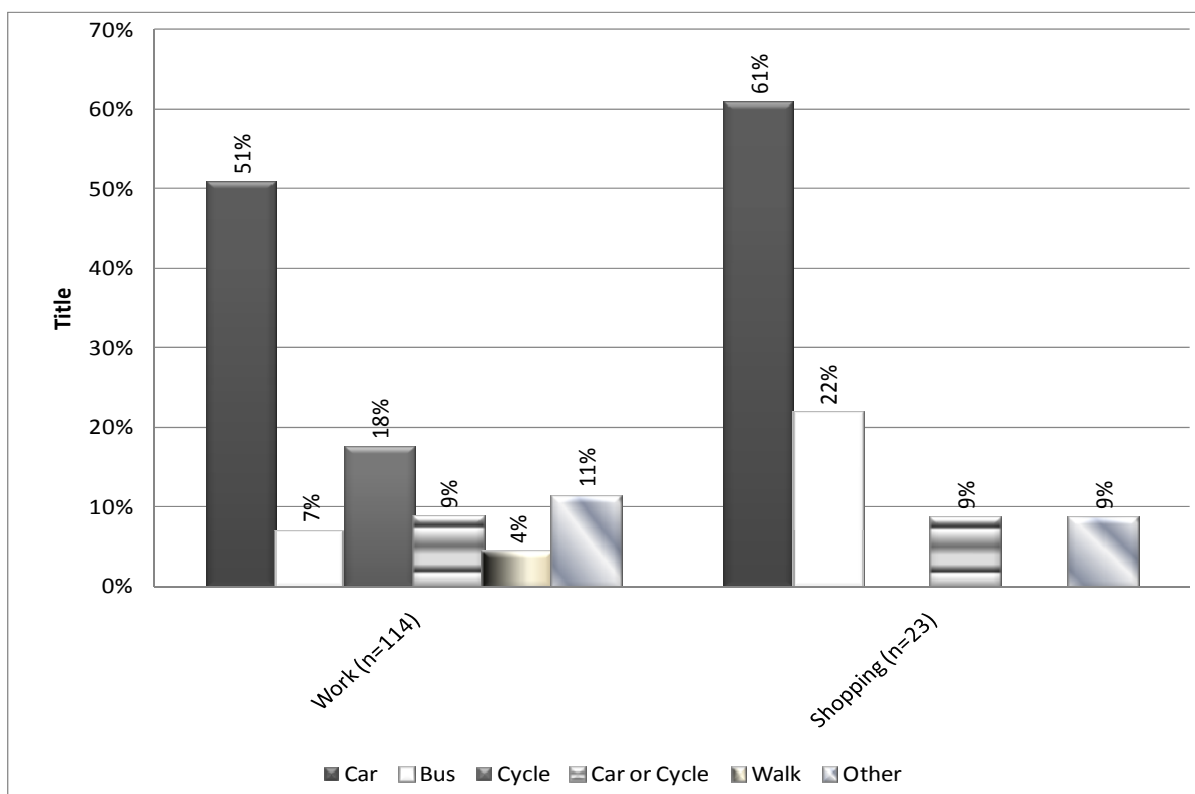
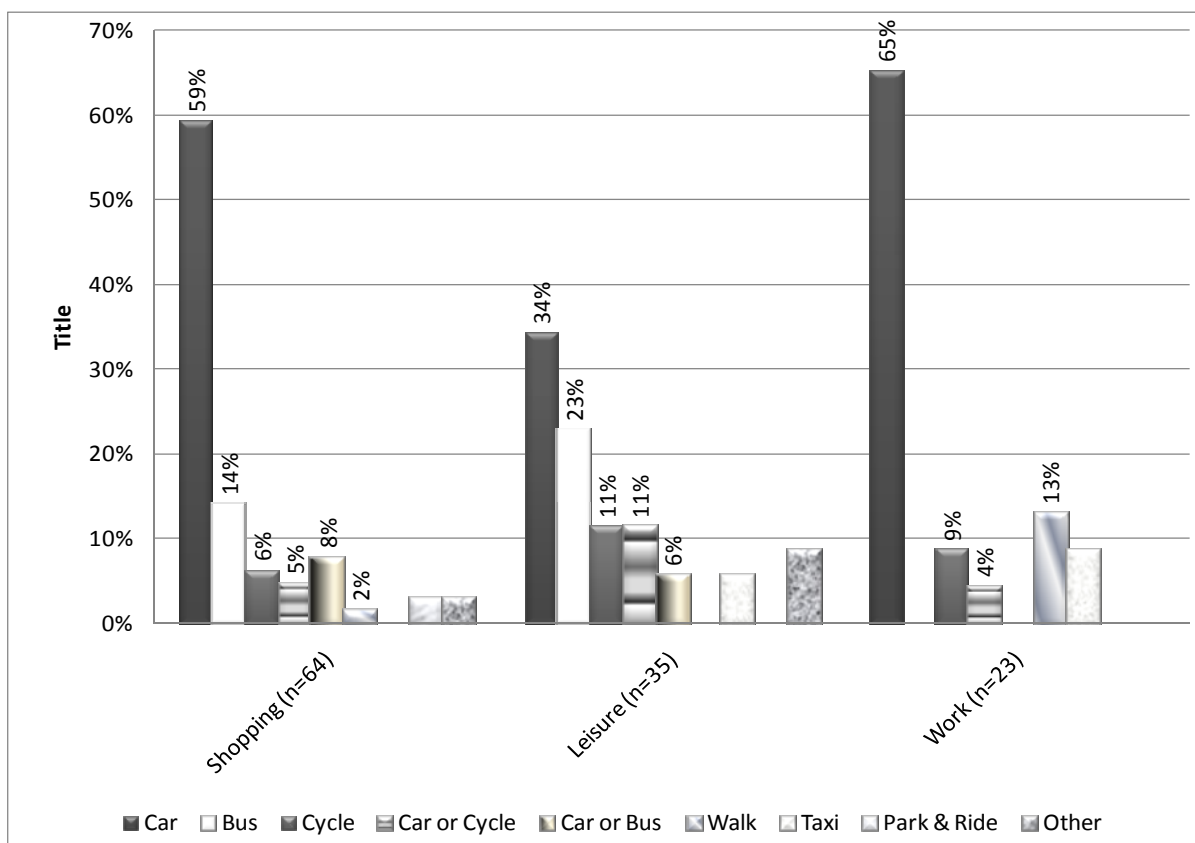
Figure 3-2: Main modes of travel used by participants prior to the intervention

3.10 Figures 3.3 and 3.4 detail the main modes of travel used by participants for the main primary and secondary journey purposes recorded prior to the intervention.

3.11 Figure 3.3 contrasts the modal split for the two most significant primary journey purposes (work and shopping) and shows a greater proportion of primary journeys for shopping were made by car (61%) when compared with primary journeys for work purposes (51%). A greater proportion of primary shopping journeys were also undertaken by bus (22%) than for work purposes (7%). However 18% of primary journeys for work purposes were undertaken by bike compared to 0% for shopping purposes.

3.12 Figure 3.4 compares the modal split for the three most significant secondary journey purposes (shopping, leisure and work). In contrast to the travel patterns for primary work journeys, a greater proportion of participants made secondary work journeys by car (65%) compared with shopping journeys (59%). In comparison just 34% of secondary leisure journeys were undertaken by car with a significant proportion being undertaken by bus (23%).

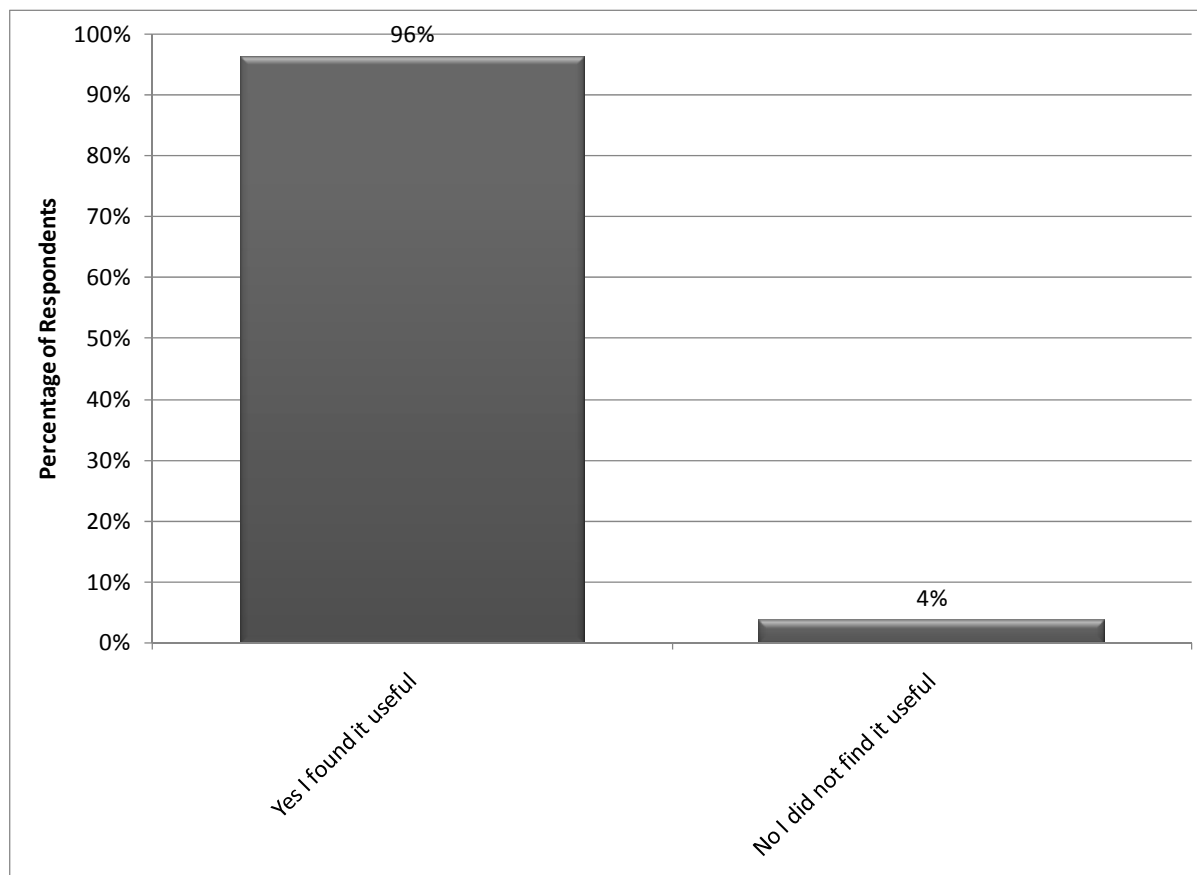
3.13 Overall the pattern of secondary journeys for shopping and work purposes indicate the use of a greater range of travel modes than for primary journeys, which might be explained by the fact that access to a car is limited for some participants.

Figure 3-3: Main modes used for two primary journey purposes prior to the intervention**Figure 3-4: Main modes used for three secondary journey purposes prior to intervention**

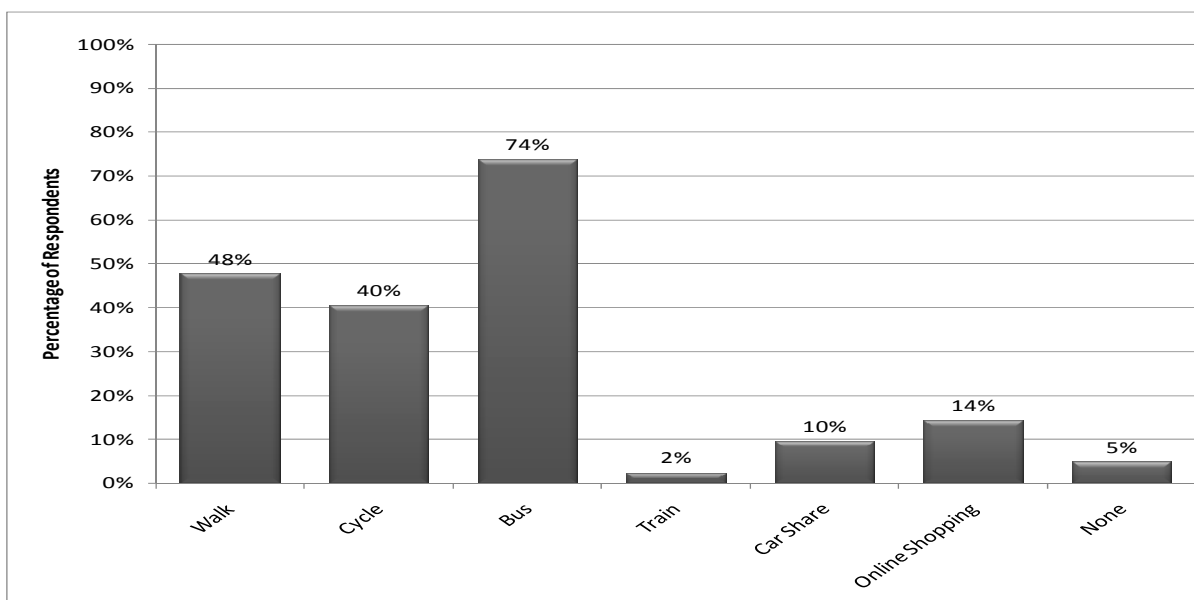
After Survey Results

- 3.14 Analysis of the after survey data shows that 99% of all respondents remembered the initial door step conversation with the travel advisor about the Travel Choice Arbury Park pilot. Only one person did not remember the door step conversation with the travel advisor because he had moved to Arbury Park following this initial contact. Of those respondents who remembered the door step conversation all of them accepted a pack of information materials to take part in the project.
- 3.15 Figure 3-5 below shows that of those respondents who had remembered the initial doorstep conversation with a travel advisor, 96% found the conversation useful in assisting them to think about different ways of travelling to and from Arbury Park.

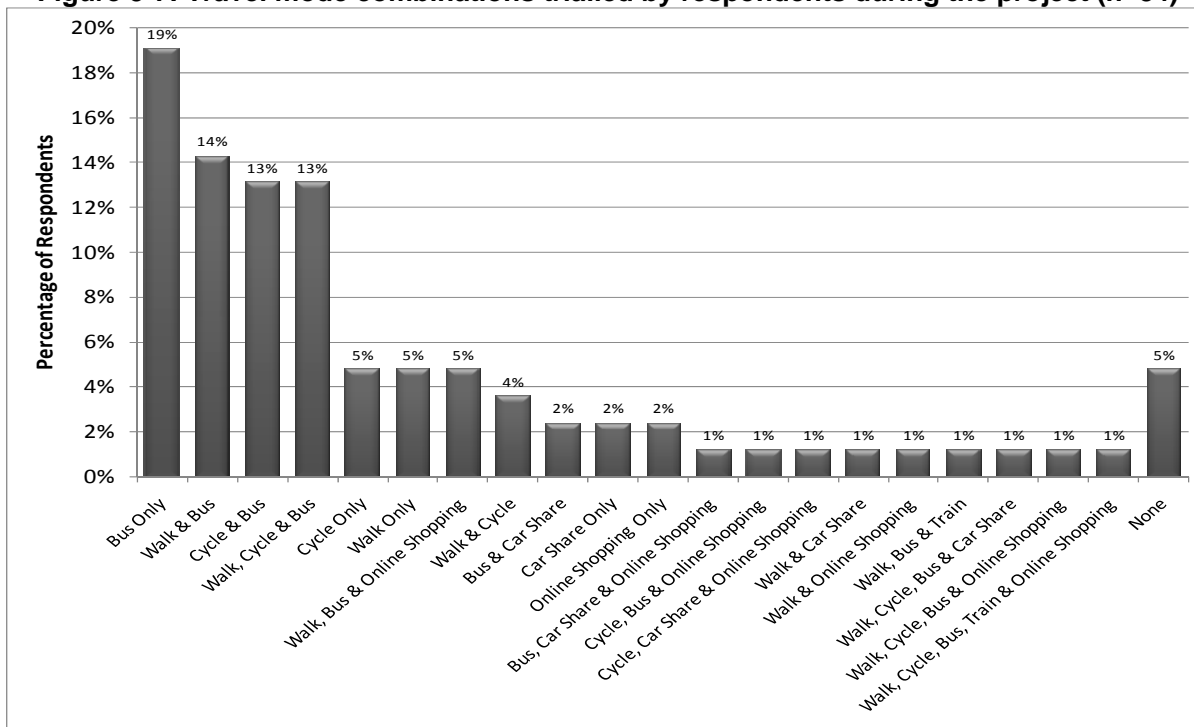
Figure 3-5: Respondents' opinions of the value of the initial door step conversation with the travel advisor in assisting them to think about different ways of travelling (n=85)



- 3.16 The most popular sustainable travel mode trialled by respondents during the project was the bus. Figure 3-6 shows that 74% of respondents to the after survey indicated that they tried out the bus, 48% of participants tried walking, 40% cycling, 14% on line shopping, 10% car sharing and 2% the train. 5% of respondents indicated that although they accepted a pack of information materials to take part in the project, they didn't actually take part by trialling a sustainable travel mode.

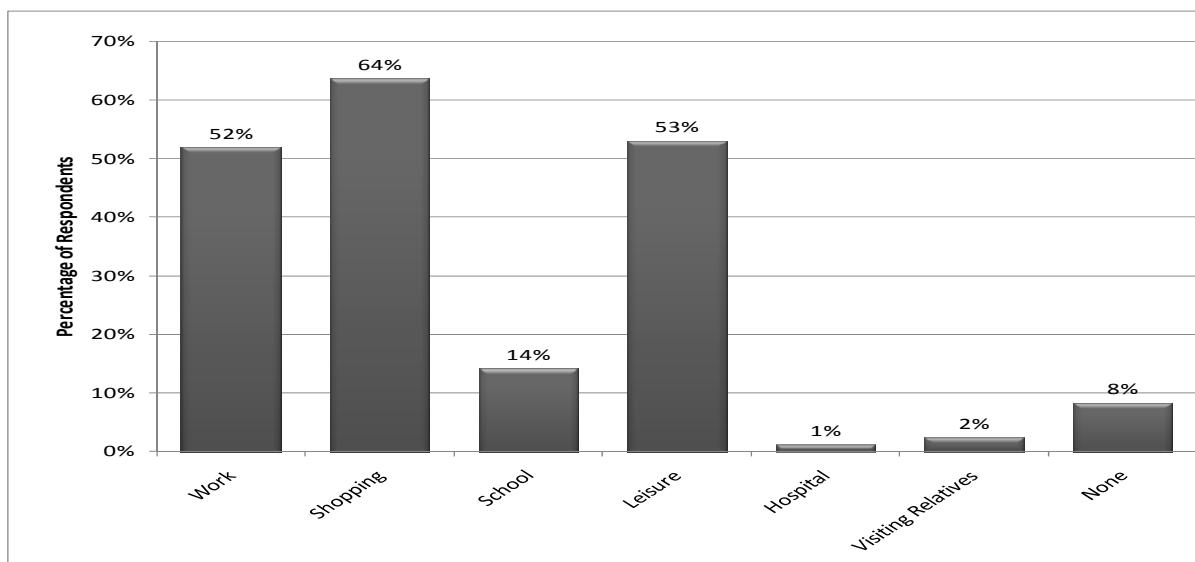
Figure 3-6: Sustainable modes trialled by respondents during the project (n=84)

3.17 Although the singular most popular sustainable travel modes trialled during the project are represented above, 62% of respondents actually trialled a combination of these modes during the project. Figure 3-7 shows that 19% of all respondents trialled the bus in isolation (although they presumably walked to the stop) with 40% trialling a combination of either bus and walking, bus and cycling or all three of these modes. In comparison only 5% of respondents trialled walking, 5% tried out cycling, 2% trialled online shopping and 2% car sharing in isolation of any other mode.

Figure 3-7: Travel mode combinations trialled by respondents during the project (n=84)

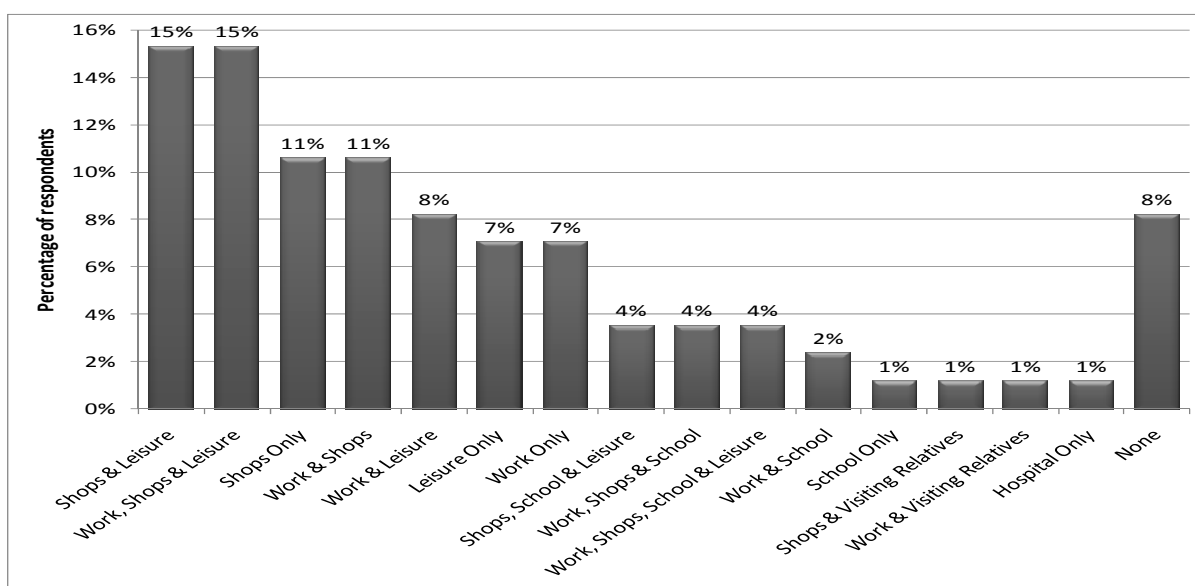
3.18 Figure 3-8 shows that the majority of respondents to the after survey indicated that they tried out a sustainable travel mode (or combination of modes) during the project for the purposes of either shopping (64%), leisure (53%) or work journeys (52%). In addition 14% of respondents trialled a sustainable mode for school journeys. 3% of respondents indicated that they didn't trial a sustainable travel mode for a particular journey purpose.

Figure 3-8: Journey purpose for which respondents trialled a sustainable travel mode during the project (n=85)



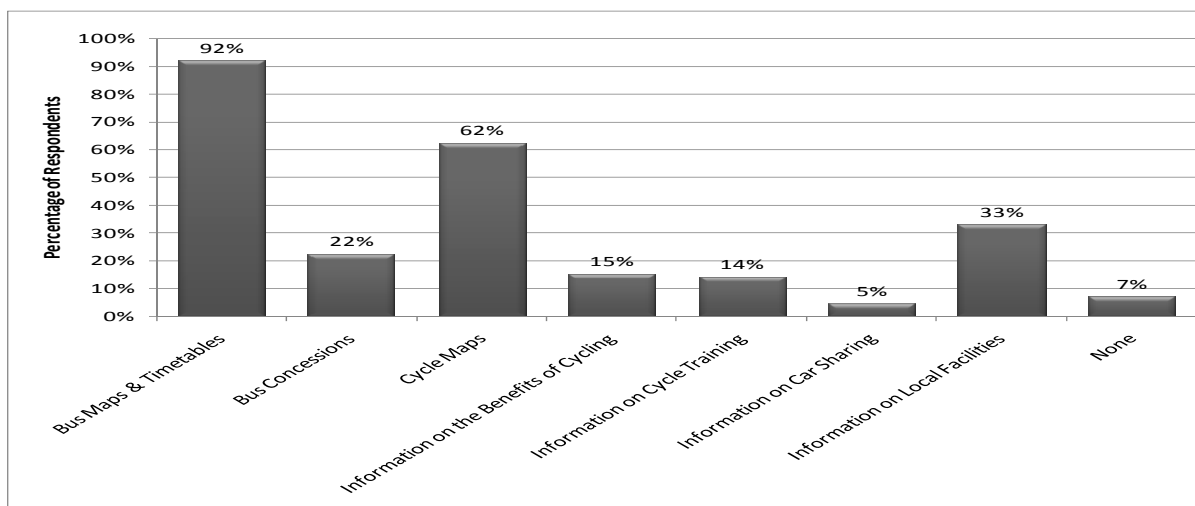
3.19 65% of respondents actually trialled a sustainable travel mode (or combination of modes) for a combination of journey purposes during the project. Figure 3-9 shows that the most popular combinations were for shopping and leisure purposes (15% of respondents), for work, shopping and leisure (15%) and for work and shopping (11%).

Figure 3-9: Journey purpose combinations for which respondents trialled a sustainable travel mode during the project (n=85)



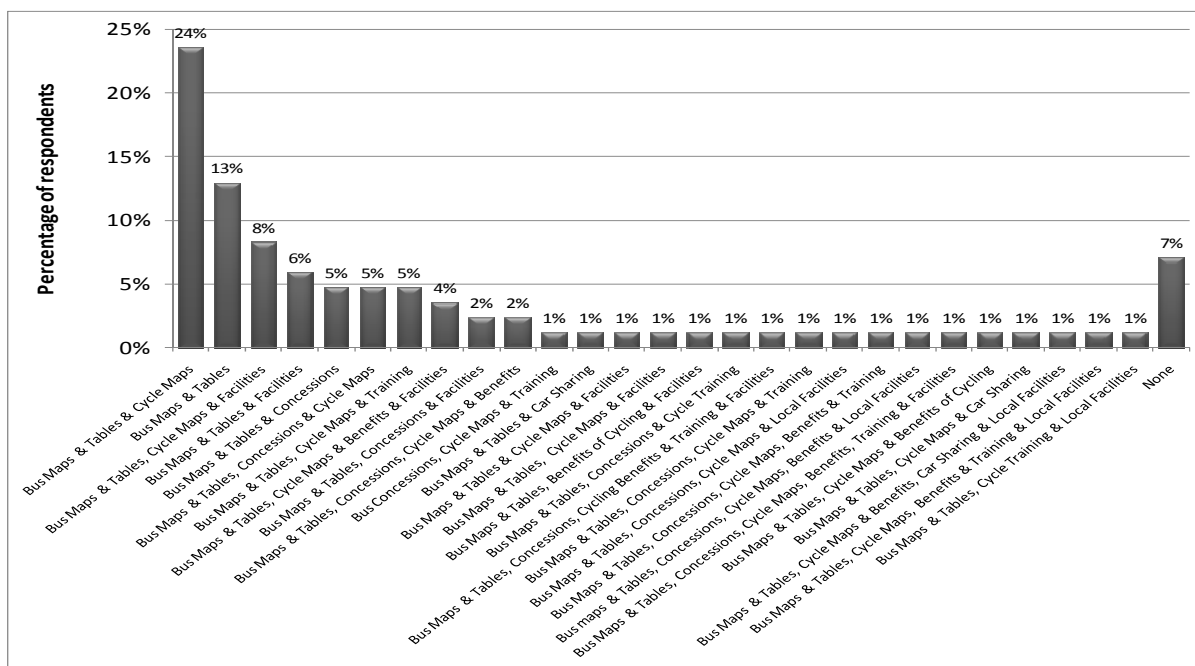
3.20 Figure 3-10 highlights the main sources of information that respondents to the after survey requested to assist their involvement in the project. The vast majority (92%) requested bus maps and timetables and a significant proportion (62%) requested cycling maps and information on local facilities (33%).

Figure 3-10: Information requested by respondents to assist their involvement in the project (n=85)



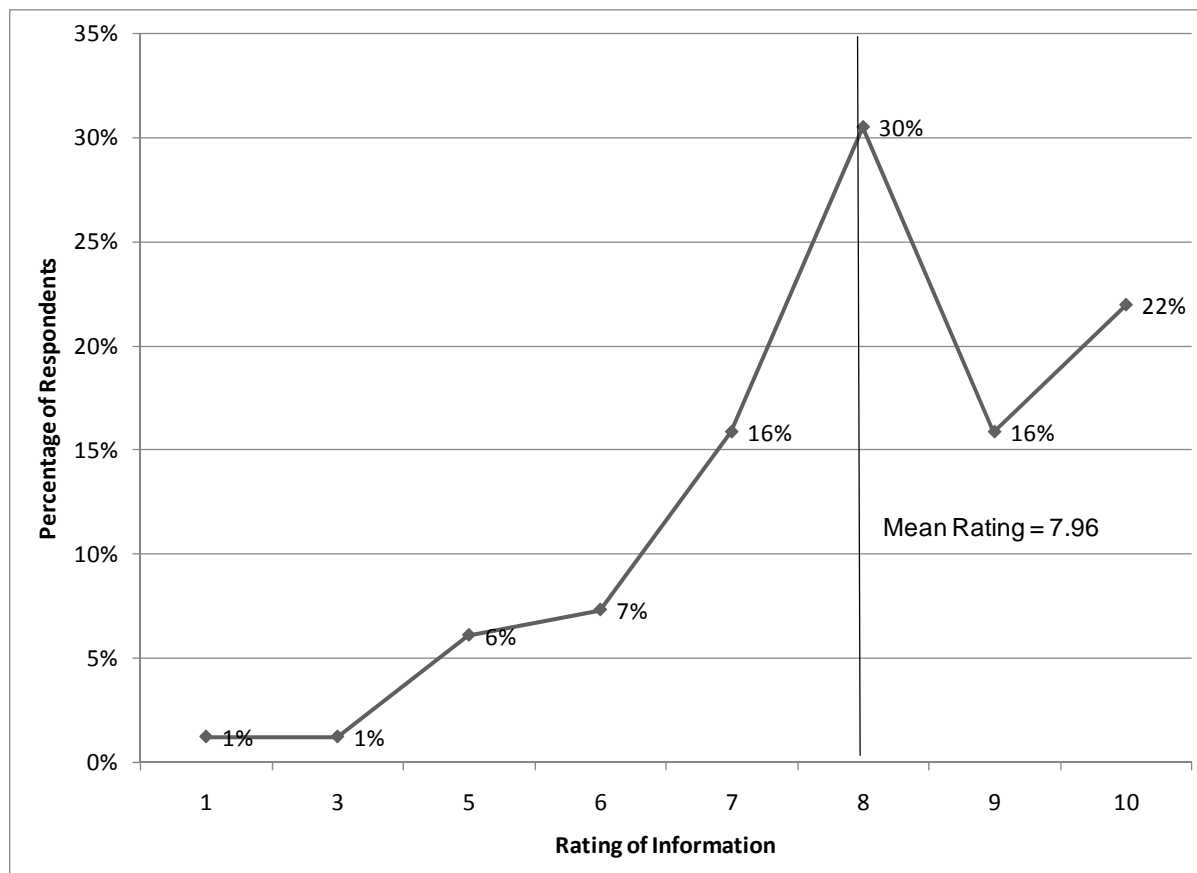
3.21 Figure 3-11 details the combinations of information types which allows us to validate the performance statistics provided in Table 3.2. 93% of participants requested some form of bus information (94% in Table 3.2), 66% requested cycling information (74% in Table 3.2) and 26% requested information on car sharing and/or local facilities (21% in Table 3.2).

Figure 3-11: Combinations of information requested by respondents to assist their involvement in the project (n=85)



3.22 Figure 3-12 shows the percentage frequency with which respondents rated the information they requested to assist their involvement in the project on a scale from 1 (not at all useful) to 10 (extremely useful). 84% of respondents rated the information provided by the travel advisors at 7 or above out of 10, with an overall mean average rating of 7.96.

Figure 3-12: Rating of information used to assist respondents to trial a different way of travelling (n=82)



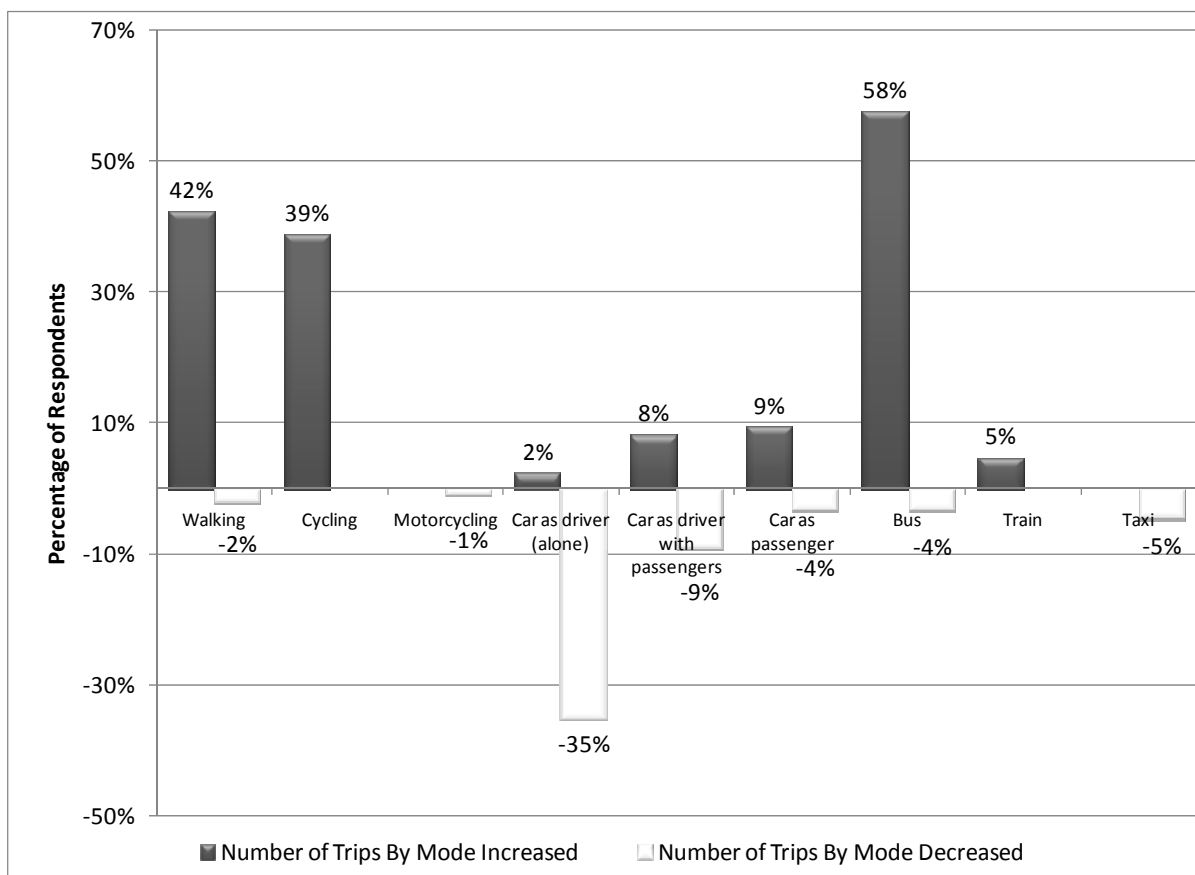
3.23 Figure 3-13 provides an indication of the overall impact of the Travel Choice Arbury Park PTP pilot in terms of promoting a change in residents' travel behaviour towards sustainable travel modes.

3.24 This analysis indicates that since taking part in the project 58% of respondents (49 people) stated that they have increased the number of trips they make by bus (4% of respondents (3 people) have reduced the number of trips they make by bus), 42% of respondents (36 people) stated they have increased the number of trips they make on foot (2% of respondents (2 people) have reduced the number of trips they make on foot) and 39% of respondents (33 people) stated they have increased the number of trips they make by bicycle.

3.25 In addition 35% of respondents (30 people) stated they have reduced the number of trips they make by car as a driver without passengers (2% of respondents (2 people) have increased the number of trips they make by car as a driver without passengers).

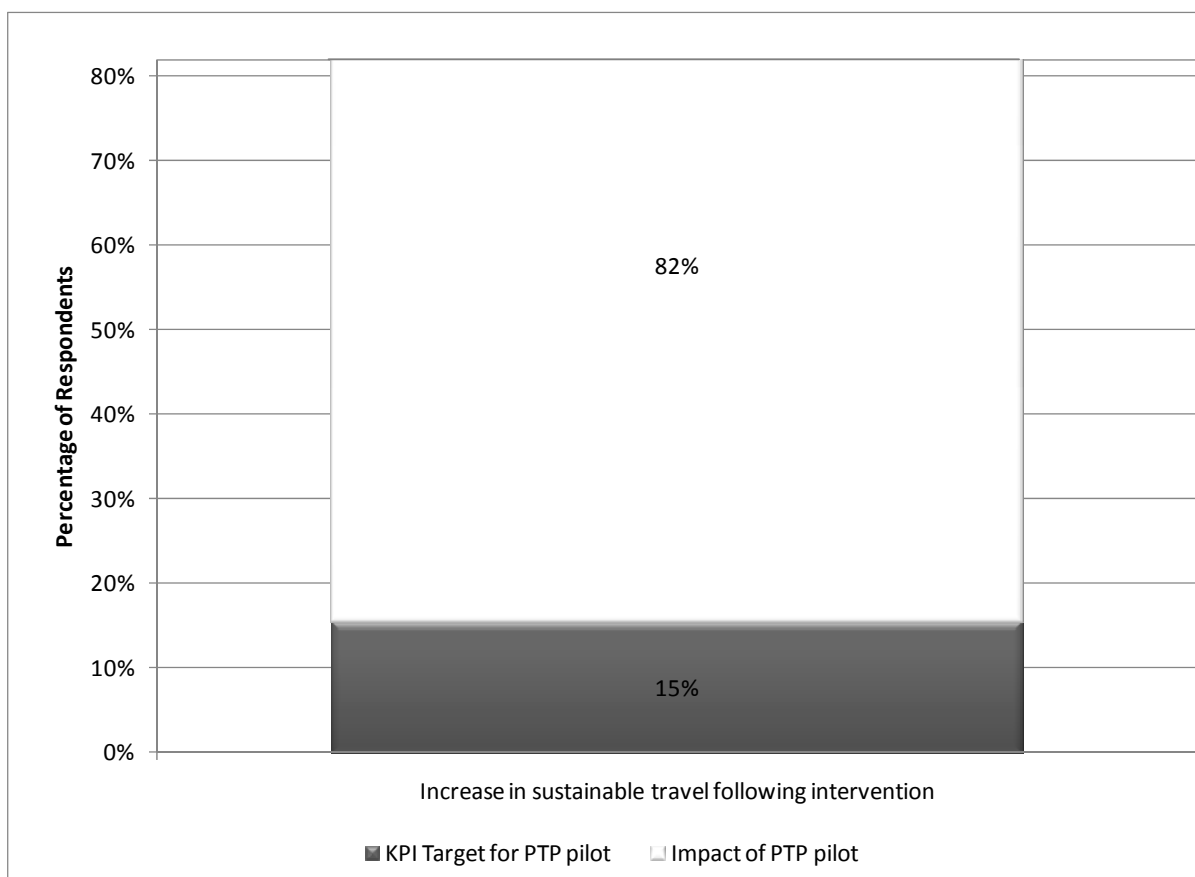
3.26 Clearly these results are by no means statistically significant and can only provide an indication of behavioural change. We did not collect data relating to either the corresponding length of these journeys, or indeed whether the increased numbers of trips by sustainable modes are in addition to, rather than in place of, car trips. However, the indications are that the pilot project has prompted a considerable change in residents' travel behaviour away from car usage towards more sustainable travel modes.

Figure 3-13: Impact of project on number of trips made by respondents by each mode of travel (n=85)



3.27 When assessing the impact of the project in terms of the key performance indicator for the evaluation, which was for a 15% increase in sustainable choices to be achieved as a consequence of the intervention, 82% of respondents indicated that they have increased their usage of a sustainable travel mode as a result of the project as illustrated in Figure 3-14.

3.28 In addition, 42% of respondents indicated that (an) other member(s) of their household had made a positive change towards sustainable travel modes since the project was introduced.

Figure 3-14: Impact of project in terms of the KPI for the evaluation (n=85)

3.29 78 additional comments were received from respondents to the after survey with respect to a number of aspects of the project. Table 3.5 highlights 65 of these comments, which can be categorised as positive, with the majority praising both the project and the work of the travel advisors. In addition to the positive feedback with respect to the initiative itself in raising awareness of the sustainable travel options available, a number of new residents made the point that it was particularly useful for people new to the area to be provided with information about the travel options available.

3.30 In addition, 13 less positive comments were made by respondents. Most of these related either to specific issues with bus services, particularly the lack of access for services into Arbury Park and to other local areas.

Table 3-5: Positive comments received with respect to the PTP pilot project

Comment	Freq
Very good / informative	11
Good/ good idea	10
Excellent	2
A well organised and informative project delivered by genuinely enthusiastic and friendly people	1
Being reminded of benefits of non-car travel was good	1
Excellent, personal and friendly service	1
Excellent, the young lady was most helpful and listened well to my pointers	1
Extremely useful. Unfortunately I am using the car more now as my circumstances have changed,	1
Fantastic telling things available	1
Fantastic, made me feel there was a community	1
Good and gives people more choice and try to think about variety of travel	1
Good-made you think about the options and good to get the cycle map	1
Great scheme, lots of info and help from staff, given lots of incentives. Well done!	1
I think it was a good idea, specially for people like us, who are new to the area	1
I think the project is very useful for new residents of Arbury Park	1
I thought it was interesting for a lot of new people to this area	1
I thought it was very useful	1
Introduced me to no 7 bus service which I wasn't aware of and is v good	1
It is an amazing initiative	1
It is useful to raise the awareness. It takes time to change people's habits though	1
It made me aware of the cost of driving and that it's not always quicker to use the car	1
It was a very good idea. Incentives for residents are important to promote bus travelling	1
It was good - It was a big help to have bus maps and passes given to us	1
It was such a useful project and really encouraged me to use other modes of transport. Margo was really friendly and helpful	1
It's very useful - especially for those such as myself who are completely new to the area	1
Overall very good - especially for people new to the area	1
Nice idea: a shame that the most receptive people were probably those who cycled anyway	1
Positive encourage and inform	1
Superb, bus tickets too	1
The free bus tickets were a very good incentive in using public transport	1
The free bus tickets were excellent. The information was useful, and the people involved were polite	1
The information was useful for those already considering alternatives, didn't help for others	1
Useful to promote the information when moving in	1
V good especially cycle training. Cheaper and healthier	1
Very good as did not know where bus stops were	1
Very helpful and lots of information as we are new to the area	1
Very helpful as I probably would have never got round to looking for information about the buses	1
Very useful information pack. Should be delivered to each household, to other areas too!	1
Very useful maps/information provided. Megarider tickets were used by my wife	1
Very, very impressed; it has been very informative and will continue to be a useful asset	1
Yes very useful. Spend less and get exercise	1
Yes, effective	1
Yes, good. Bus information very useful	1
Yes, it was really good and useful as I didn't know any of the required buses or cycle paths which I intend to try along with reducing my general car usage	1
Yes, it was worthwhile and motivating	1

Table 3-6: Less positive comments received with respect to the PTP pilot project

Comment	Freq
Could have had more impact had the number 4 bus been on site	1
Feel buses are not frequent enough	1
I think it is unbelievable that residents cannot find this information out for themselves	1
It could be very helpful, but the buses are confusing	1
No - state of Arbury Park sends out wrong messages but guided bus hopeful (to motivate people to think about lifestyle). Think roads, pavements, communal areas a disgrace (rubbish strewn etc)	1
Not very useful	1
Public transport to nearby villages (Cottenham) need improving	1
Service to Milton Tesco would be really useful	1
The bus is very expensive so we never use it	1
Trouble getting to Citi 1 and 4 bus stops with push chair, but would rather Citi 4 doesn't ever come through Arbury Park because of noise/pollution. Parking at Grafton Gate centre for 2 hours is cheaper than getting the bus	1
We desperately need C7 stop and Arbury Park stops need to be in use now	1
When talked about travel and project, with neighbours, state of Arbury Park is a real disincentive to walking and cycling. The circus loop is nice but what about the rest of it? When is Citi4 starting? People are running through Arbury Park to avoid queues on Kings Hedges Rd in morning peak hour	1
Would benefit from more actions to improve current public transport services (i.e. bus reliability etc)	1

Qualitative Telephone Interviews

3.31 The after survey was followed by 20 qualitative telephone interviews in order to validate the behavioural change data collected and further inform the adaptive learning process. In summary, the main findings from the telephone interviews were:

- ❑ The majority of respondents would not have tried a sustainable travel mode had they not received the contact from the travel advisor.
- ❑ The vast majority of respondents indicated that their sustainable travel choices have increased as a result of taking part in the project, validating the findings above.
- ❑ In addition, a majority of those respondents who share their household indicated that the travel patterns of the other members of their household had also changed in favour of sustainable modes of transport.
- ❑ Bus services were perceived generally to be good, with a few exceptions. The main issue with the Citi services was that they currently do not come through the development, which would provide a more seamless journey and further reduce barriers to public transport usage for residents.
- ❑ Car sharing was no better or worse than anticipated although the ability to share a journey by car depended upon the flexibility of the people involved.
- ❑ Cycling on the whole was perceived to be good although the sequencing of traffic lights on Arbury Road was criticised as not currently allowing cyclists time to cross the junction safely.
- ❑ The walking experience was perceived to be good but the street signage in the local area (beyond Arbury Park) was criticised.

4 CONCLUSIONS & RECOMMENDATIONS

- 4.1 Although this 'light touch' evaluation does not provide statistically significant results, the indications are that the pilot project has been successful in terms of:
- Raising awareness of sustainable travel modes;
 - Encouraging participation in the PTP process;
 - Increasing the sustainable travel choices made by residents of Arbury Park; and
 - Providing valuable feedback on local infrastructure barriers.
- 4.2 Based on the broad findings from the evaluation, it would appear that the key performance indicator of encouraging a 15% increase in the use of sustainable modes is likely to have been achieved (and indeed well exceeded). The project appears to perform well in comparison to other residential PTP projects⁵, with particularly strong qualitative feedback. This re-enforces the view that new movers are likely to be particularly responsive to PTP programmes. However, the limitations of the evaluation approach clearly preclude us from drawing these conclusions with any degree of statistical confidence.
- 4.3 The information and incentive resources used would appear to have had a particularly strong impact in encouraging the uptake of bus, walking and cycling and in reducing car use beyond the initial trial period. Bus use was particularly well promoted to residents during the pilot project with evidence (obtained from the post project-satisfaction surveys) suggesting a considerable increase in usage as a result. However, it would be interesting to assess the travel patterns of residents over a longer time period to assess the impact of the project on habitual travel behaviour.
- 4.4 As a pilot project it is important to make recommendations for the tools and techniques that could be improved for future PTP projects in the local area (adaptive learning). The following points should be noted therefore with respect to the Arbury Park PTP experience:
- The evaluation indicates that one of the reasons for the success of the pilot project was its timing with respect to the occupation of the Arbury Park development. The indication is that by providing information and incentives to residents as they move to the area and are in the process of establishing their travel patterns is a very effective way of prompting a change in habitual travel behaviour. The implementation of PTP projects at other new developments in the area should therefore be encouraged.
 - The provision of Megarider vouchers to virtually all households who actively took part in the intervention appears to have had the strongest impact in prompting the greatest increase in usage of any of the sustainable travel modes. Incentives of this type alongside well designed information resources (the bus timetables, and bus and cycling maps were particularly well received) are clearly effective PTP tools, but only where they are used to promote services where the existing offer is good with limited barriers to usage.

⁵ The DfT report Making Personal Travel Planning Work (2007) states that within the UK PTP has been reported to typically reduce car driver trips by 10% (amongst the targeted population).

- With respect to this last point it is clear from the evaluation that the existing Citi bus service offer could be improved by diverting these services through Arbury Park. In addition, improvements could be made to the sequencing of the traffic lights at the junctions of the development with the main road network to facilitate cycling and also in improving the pedestrian signage on the main routes into the city.
- It would be useful to undertake a follow up survey 6-12 months following the intervention to measure any longer term impact of the intervention on habitual travel behaviour.

APPENDIX A

After Survey Questionnaire

In July and August, Cambridgeshire County Council ran Travel Choice Arbury Park, a project at Arbury Park to encourage residents to try out the travel choices available to them. We understand that you were approached to take part in this project during a door step conversation with one of our travel advisors.

To assist us in evaluating this project we would be grateful if you would complete the following questionnaire, which should only take a few moments of your time. **Everyone who returns a completed questionnaire will be entered into a draw to win £50 of M&S vouchers.**

**PLEASE RETURN THE QUESTIONNAIRE IN THE FREEPOST ENVELOPE PROVIDED
BY 30TH SEPTEMBER 2008 TO ENSURE THAT YOU HAVE A CHANCE TO WIN!!**

Q1. Do you remember the door step conversation with our travel advisor about the Travel Choice Arbury Park project?

Yes ☐ **GO TO Q2**

No ☐ **GO TO Q12**

Q2. Did you find this conversation useful in assisting you to think about different ways of travelling to and from Arbury Park?

Yes ☐

No ☐

Q3. Did you accept a pack of information materials to take part in the Travel Choice Arbury Park project?

Yes ☐

No ☐

Q4. Which of the following means of travelling did you try out as an alternative to driving during the project? **(Please tick all that apply to you)**

a. Walk	<input type="checkbox"/>
b. Cycle	<input type="checkbox"/>
c. Bus	<input type="checkbox"/>
d. Train	<input type="checkbox"/>
e. Car share	<input type="checkbox"/>
f. Online shopping instead of travelling to a store	<input type="checkbox"/>
g. Other (Please write in space provided):	
h. None of the above	<input type="checkbox"/>

Q5. For which of the following journeys did you trial this alternative to driving during the project? **(Please tick all that apply to you)**

a. Work	<input type="checkbox"/>
b. Shops	<input type="checkbox"/>
c. School	<input type="checkbox"/>
d. Leisure	<input type="checkbox"/>
e. Other (Please write in space provided):	
f. None of the above	<input type="checkbox"/>

Q6. What information did you request to assist your involvement in the project? **(Please tick all that apply)**

a. Bus maps and timetables	<input type="checkbox"/>
b. Information on bus concessions	<input type="checkbox"/>
c. Cycle maps	<input type="checkbox"/>
d. Information on the benefits of cycling	<input type="checkbox"/>
e. Information on cycle training	<input type="checkbox"/>
f. Information on car sharing	<input type="checkbox"/>
g. Information on local facilities	<input type="checkbox"/>
h. Other (Please write in space provided):	
i. None of the above	<input type="checkbox"/>

PLEASE TURN OVER →

Q7. Overall how would you rate this information in assisting you to try out a different way of travelling on a scale from 1 to 10, with 1 representing not at all useful and 10 representing extremely useful? **(Please circle your rating on the scale provided)**

1 2 3 4 5 6 7 8 9 10
 Not At All Useful ←————→ Extremely Useful

Q8. Have you changed the number of trips you make using the following means of travelling since taking part in the Travel Choice Arbury Park project? **(Please tick one box on each line to indicate whether your usage of that means of travelling has changed since taking part in the project)**

	Yes: increased	Yes: decreased	No: stayed the same	Not applicable
a. On foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. By bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. By motorcycle/moped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. By car as driver (alone)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. By car as driver (with passengers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. By car (as passenger)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. By bus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. By train	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. By taxi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q9. Have any other members of your household changed the way that they travel since the project was introduced?

Q10. Overall, what did you think of the Travel Choice Arbury Park project as a way of encouraging people to try out the different travel choices available to them?

Q11. Would you be willing to take part in a short telephone interview to follow up your responses to the above questions? If so please provide your telephone number below.

Yes ☐
 No ☐

Q12. If you would like to be entered into the prize draw to win £50 of M&S vouchers please provide your name, address and a contact number below, otherwise you can leave this blank:

Name:

Address:

Telephone number:

Thank you very much for completing this questionnaire. Your responses will remain confidential and will be used for the purposes of this research only.

Please return the questionnaire in the freepost envelope provided.

APPENDIX B

Telephone Interview Topic Guide

Title: Travel Choice Arbury Park Post Project Evaluation

Document: Telephone Interview Topic Guide

Date: 8th October 2008

Author: Jim Bradley

Project Code: 1003 – Arbury Park

Rev: Final 1.3



1 INTRODUCTION

1.1 Good afternoon/evening. My name is X and I work for a transport consultancy called Integrated Transport Planning Ltd. We are currently evaluating the Travel Choice Arbury Park project for Cambridgeshire County Council.

1.2 I understand that you took part in this project which was run to encourage residents to try out the travel choices available to them? You also completed a short survey providing feedback about this project and indicated your willingness to take part in a telephone interview to follow up your responses?

Could you please spare 5 minutes to answer a few short questions about the project?
[IF NO / PARTICIPANT UNAVAILABLE TRY TO MAKE AN APPOINTMENT TO RING BACK AT A MORE APPROPRIATE TIME].

2 REVIEW OF REPORTED OUTCOMES

2.1 You indicated in your survey response that you tried **[MODE(S) INDICATED IN Q4 OF THE SURVEY]** during the project for the purpose of travelling to **[JOURNEY PURPOSE INDICATED IN Q5]**.

a) How would you describe your experiences of using this mode(s) of transport for these journeys during this trial? **[WHERE NECESSARY PROMPT WITH:**

- *Good / bad / better/worse than anticipated.*
- *What was good about it / bad about it?*
- *Any particular problems or issues faced in using the transport mode for these journeys?*
- *Any particular benefits of using the transport mode for these journeys?]*

- b) Would you have considered trying an alternative travel mode had you not received the contact from the Travel Choice Arbury Park Travel Advisor?

[PROMPT WITH:

- *Why / why not?*

- 2.2 You also indicated in your survey response that since taking part in the Travel Choice Arbury Park project.... **[SUMMARISE RESPONSE TO Q8 IN TERMS OF OVERALL CHANGE IN TRAVEL BEHAVIOUR PATTERNS OR NO CHANGE IN BEHAVIOUR]**

[IF TRAVEL BEHAVIOUR HAS CHANGED ASK:]

- a) Have your travel patterns changed directly as a result of taking part in the Travel Choice Arbury Park project?

- b) Can you please explain why your travel patterns have changed in this way following your involvement in the project?

[ALTERNATIVELY, IF TRAVEL BEHAVIOUR DID NOT CHANGE ASK:]

- a) Can you please explain why your travel patterns have not changed following your involvement in the Travel Choice Arbury Park project?

[THEN IN BOTH CASES:]

- c/b) Have the travel patterns of any other members of your household changed as a result of taking part in the Travel Choice Arbury Park project? **[IF YES, PROMPT WITH:**

- *Who changed their travel patterns?*
- *How did they change?]*

- d/c) Do you think that you/ the members of your household will continue to travel this way in the future? **[PROMPT WITH:**

- *Why/why not?]*

3 REVIEW OF OTHER COMMENTS MADE

3.1 You also reported that overall **[SUMMARISE ANY RESPONSE TO Q10 AND ASK FOR CLARIFICATION IF REQUIRED. THEN/OTHERWISE ASK:]**.

- a) Do you have any other comments you wish to make about the Travel Choice Arbury Park project or about ways in which we could further encourage residents to use alternative means of travelling to the car?

4 DEMOGRAPHIC CHARACTERISTICS

4.1 Finally can I please ask what was your age at your last birthday?

4.2 Interviewer to note gender below:

Male ☐

Female ☐

Thank you for taking part in this short interview. Please be assured that your responses will remain confidential and be used for the purposes of this research only.

Appendix 4: Orchard Park Meetings

Orchard Park Meetings

Developer liaison was mainly planning focussed and not coordinating other community issues.

OPAG set up to look at all issues and monitor issues log.

Partners Group set up to look at getting the development tidied up and now moved on to reviewing the options for kick starting the development and completing it.

Park Arts and OP Interest Group are community groups assisted by SCDC focusing more on the delivery of services and arts across the development.

Other groups are free floating interest groups related to Orchard Park.

Orchard Park Community Council
Nine Councillors – 1st meeting 11th June 2009.

Residents Forum

Partners Group – Strategic to look at kick-starting development involves developers, house builders, City council, County, Horizons, RSLs etc.

Orchard Park Interest Group
Meets every other month – Liaison group looking at the delivery of services across the development (Operational group)
Members – Carly Meaghy, CDO Cambs City, Youth worker, Orchard Park residents, Police, Health, SCDC, School

Public Art Project Management Group
Manages the public art budget for Orchard Park
Members – SCDC, Gallagher's, OPCC, Neighbourhood artist, Rep from Park Arts, CDO

Orchard Park Action Group (OPAG)
Meets monthly to take action on issues at Orchard Park
Members – SCDC Officers, Local SCDC & CC Members, OPCC & Gallagher's, School governor

Histon Sector Neighbourhood Police Panel

Histon to Cambridge Guided Bus Forum

Park Arts
Independent group working in partnership with the Community Council to deliver arts projects.
Members – SCDC, Neighbourhood artists, residents, OPCC, Local arts development manager, CDO

SCDC/Developer Liaison Meeting
Meets monthly - to discuss planning issues on site
Members – Gallagher's, SCDC officers