



Attleborough Smarter Choices Final Report Breckland Council

29 November 2012

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Quality Management

Title	Attleborough Smarter Choices Draft Report.		
Location	Dereham		
Date	29 November 2012		
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1. Introduction

1.1 ABOUT THE REPORT

1.1.1 In summer 2012, Capita Symonds was commissioned to undertake transport work to support the Attleborough and Snetterton Heath Local Plan. The ASHLP plans the growth of Attleborough and Snetterton Heath. Headline figures are:

- 4,000 dwellings as an urban extension in Attleborough;
- 10Ha of employment land at Attleborough;
- Related infrastructure to include a new link road, an expanded High School and 2 to 3 Primary Schools;
- 20Ha of employment land at Snetterton Heath; and
- An improved town centre

1.2 WHAT ARE SMARTER CHOICES?

1.2.1 Smarter choices are techniques for influencing people's travel behaviour towards more sustainable options - walking, cycling or using public transport, seeking to reduce the number and length of trips and not making the journey in the first place.

1.2.2 Importantly smarter choices is not an anti-car campaign. The car will still be an important mode of transport for the area due to levels of ownership in the study area, but also for some in outlying rural areas with little or no bus service provision. Furthermore, car sharing is an ever increasingly popular smarter way to travel. There are also ways of driving a car that can reduce fuel consumption, reducing driving costs and emissions.

1.2.3 However, by improving the choice of transport modes, improving the provision for certain modes, promoting the different smarter choices available as well as emphasising the benefits to an individual's finances and health this smarter choices strategy will result in modal shift to more sustainable modes of transport.

1.2.4 In the case of Attleborough and Snetterton Heath, smarter choices is about being part of a strategy for seeking to reduce the traffic impact on the town centre as well as seeking to accommodate the traffic related to the growth of the town. The trips to nearby villages, towns and cities are the third element that will benefit from the smarter choices work.

1.2.5 Smarter choices will provide attractive and deliverable alternatives to single occupancy car journeys.

1.3 THE BRIEF

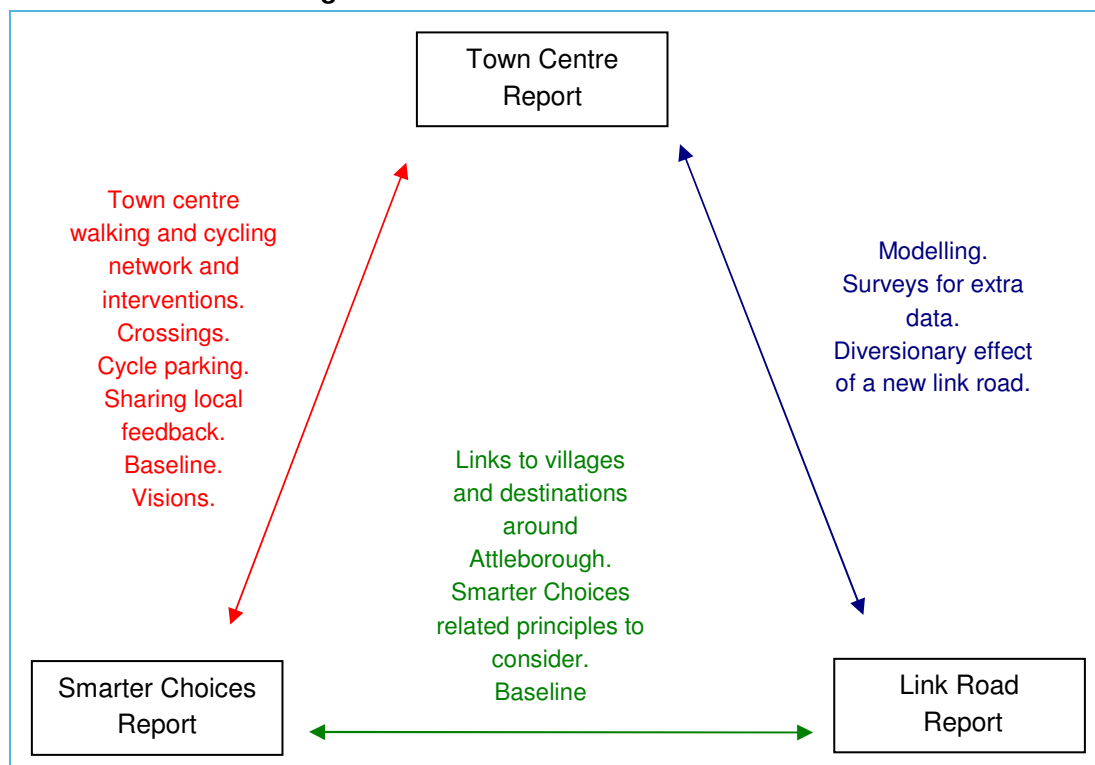
1.3.1 The key elements the smarter Choices work is required to address are as follows:

- i) The Smarter Choices Report will be both a technical evidence document to inform the policy approach in the ASHLP as well as being a report which will influence the activities of agencies that have a responsibility for delivering smarter travel choices.
- ii) The Report will address how smarter choices can contribute to reducing local traffic congestion; enhance accessibility for all residents to jobs and services; make local roads and rail crossings safer and improve local environmental quality (including air pollution).
- iii) The Report is required to identify a combination of the hard measures (infrastructure) and softer/complimentary measures to sustain modal shift and provide an attractive and deliverable alternative to single occupancy car journeys.
- iv) Critically, the report will contain an implementation and delivery section which will set out how the measures can be delivered, approximate costs and identify prospective delivery bodies, including developers, and be mindful of the forthcoming CIL regime.
- v) It is important that the Report identifies targets for modal shift and how they can be monitored.

1.4 LINKS WITH OTHER TRANSPORT STUDIES

- 1.4.1 At the same time as commissioning the Smarter Choices Study, Breckland Council also commissioned studies to look into the traffic movement around Attleborough Town Centre as well as look in more detail at a new link road between the B1077 to the south of the railway and London Road.
- 1.4.2 All three studies were awarded to Capita Symonds in summer 2012 offering the opportunity for close working between the three separate project teams.
- 1.4.3 During the production of the three reports, all three teams were in regular contact.

Figure 1 Interactions between the three teams



1.5 A SMARTER MODE HIERARCHY

- 1.5.1 The report is set out in a form that reflects a mode hierarchy. The hierarchy is based on potential to benefit carbon emissions, health and personal finances. A potential hierarchy could be:
- i Reducing the need for travel in the first place
 - ii Walk
 - iii Cycle
 - iv Public transport
 - v Car share
 - vi Reducing the number and length of trips
 - vii Using more efficient, lower carbon vehicles/fuels. Electric cars/hybrid cars
 - viii Using existing vehicles more efficiently

Figure 2 Comparison of Smarter Modes.

Red: The mode of transport does not result in benefits

Amber: The mode of transport could see benefits

Green: The mode of transport results in benefits

	Health Benefits	Carbon Emissions	Monetary benefits	Convenience	Journey Time
Single Occupancy Car Use	Red	Red	Red	Green	Green
Reducing the need for travel in the first place	Amber	Green	Green	Green	Green
Walk	Green	Green	Green	Amber	Red
Cycle	Green	Green	Green	Amber	Amber
Public transport	Amber	Amber	Amber	Red	Amber
Car share	Amber	Amber	Amber	Green	Green
Reducing the number and length of trips	Amber	Amber	Green	Green	Green
Using more efficient, lower carbon vehicles/fuels. Electric cars/hybrid cars	Amber	Amber	Amber	Amber	Green
Using existing vehicles more efficiently	Amber	Amber	Amber	Amber	Green

- 1.5.2 The table at Figure 2 compares the Smarter Modes against key criteria of Health Benefits (moving more or impact on air quality), Carbon Emissions, Monetary Benefits (impact on an individual's finances), Convenience and Journey Time.
- 1.5.3 Taking walking as an example, whilst it sees people moving more, has no direct carbon emissions and is effectively free, for some journeys it is less convenient and journey time is greater than using the car for example.
- 1.5.4 Turning to Car Sharing, carbon emissions are lower as they are less than single occupancy, but not as low as walking and cycling. Money is saved when compared to single occupancy car use, but again is more than walking for example. But convenience and journey time are equivalent to single occupancy car use.

- 1.6 REDUCING THE NUMBER AND LENGTH OF TRIPS
- 1.6.1 Whilst forming part of the mode hierarchy, this is linked to other Smarter Choices options. For example, the number of car trips can be reduced by making walking and cycling or public transport more attractive. The number of total trips can be reduced by working from home.
- 1.6.2 There is also a role for masterplanning of the new development and responding to the needs of the people who will live there. For example it is common practice to provide Primary Schools within residential areas. Furthermore, there are employment opportunities around the town at the moment and will be in the future with the provision of 10Ha of Employment Land near to Attleborough. As such, this element of Smarter Choices does not have its own section.

- 1.7 SMARTER CHOICES INCREASING CAPACITY?
- 1.7.1 It is important to understand that whilst the Smarter Choices work will result in increased use of alternative modes instead of single occupancy car use, by doing so, this could result in more capacity on the roads for more vehicular traffic.
- 1.7.2 With the ASHLP area undergoing such significant change, including growth, this extra capacity created could be taken up by related traffic movements which could be seen as one of the aims of Smarter Choices work. Conversely, a commuter choosing to cycle or take the bus for example could remove that particular car trip which leaves the car available for someone else to use (although not necessarily in the peak hour).
- 1.7.3 It is therefore essential that the Smarter Choices Strategy maintains its effectiveness over time and that the benefits to encourage modal shift are locked in. The Strategy, once started, is likely to be ongoing.

2. Vision and Objectives

2.1 THE VISION FOR SMARTER CHOICES

2.1.1 As part of the Stage 1 report, a vision for Smarter Choices has been produced. The vision seeks to explain how things could be in 2026. The key elements of the vision are:

- i) *'...aware of the alternatives...'* – it appears that a greater understanding of the alternatives to single occupancy car use is needed. Travel behaviour can be habitual.
- ii) *'...obvious choice...'* and *'...easy...'* – in order to tempt people out of single occupancy car use, the alternatives need to be an obvious choice and be easy.
- iii) *'...safer...'* and *'...safe and attractive routes...'* – to various consultations, many have responded saying that they do not feel safe to walk or cycle around certain areas of the town. This is likely to deter some from using some Smarter Modes.
- iv) *'...considerate...'* – another key message is that some road users do not consider the needs of others. This could be the speed of traffic coming around the corner from Norwich Road into Surrogate Street, it could be traffic letting pedestrians cross at the build outs on High Street or cyclists cycling on footways.
- v) *'...meet the needs...'* – alternatives to single occupancy car use will only be successful if they go to where people want to go and when.
- vi) *'...link coherently...'* – and seamlessly. The walking and cycling networks for the villages, town and urban extension must link well together so residents can continue their entire journey.

By 2026, in the Attleborough area...

...dependency on single occupancy car use for all trips will have reduced because existing and new residents will be **aware of the alternatives**. Smarter travel will be the **obvious choice** as it will be **easy** to move about the area to access services and facilities by walking, cycling and public transport.

...the Urban Extension will be a positive force for delivering sustainable development by increasing self containment and reducing the need to travel. This will be achieved by providing jobs, facilities and services locally with distances to travel to work reduced significantly.

...active travel will be used for short journeys and the national trend of a decline in walking trips will have been reversed locally as Attleborough will become a **safer** area to walk and cycle around because drivers, cyclists and pedestrians will be **considerate** of each other.

... bus services will be greatly improved and **meet the needs** of the entire town's residents as well as the nearby villages that rely on the services Attleborough provides. It will be easier to travel to more destinations (such as the Norfolk and Norwich hospital) more frequently and on quality buses. Convenient Sunday bus travel will be available to all residents.

...the train will be used more for both people and freight, but the impact of the train passing through the town will have reduced with the automated crossing on Station Road. The railway station will be a hive of activity with greater use of the existing (listed) buildings being used appropriately and car and cycle parking improved.

...pedestrian and cycle routes will form the basic element of the movement structure of the Urban Extension which will **link coherently** to the existing town. The barrier effect of the railway to those living to the south will be addressed by the introduction of more places where pedestrians and cyclists can cross the tracks in a safe way.

... residents living and working up to around four miles from the town will be able to make the journey to and from Attleborough by cycle utilising **safe and attractive routes**.

...the changes to the movement network in the town will have appreciated the conservation area. The Nitrogen Dioxide levels in the area will continue to be below the level requiring air quality management.

2.2 SMARTER CHOICES OBJECTIVES

2.2.1 The Smarter Choice Vision has informed the following objectives:

- i To reduce single occupancy car use in the area by increasing Smarter Mode share.
- ii To provide alternatives to single occupancy car use that are easy, obvious and safe.
- iii To engender, in all road users, consideration of other road users.
- iv To link the Urban Extension coherently and seamlessly to the Town and Village and Destinations walking and cycling network.

3. Reducing the Need to Travel

3.1 WHY REDUCE THE NEED TO TRAVEL?

- 3.1.1 Reducing the need to travel is a key component in reducing the number of vehicles on the highway. By taking away the need for someone to drive or offering an alternative you can potentially remove a trip off the highway network.
- 3.1.2 Reducing the number of trips on the highway network in Attleborough would have many advantages, such as less congestion, reduced emissions, reduced parking problems, better environment for pedestrians and cyclists to name a few. Ultimately the reduction in trips would improve the town's environment but also potentially removes the need to provide costly infrastructure improvements.
- 3.1.3 Reducing the need to travel or offering alternative "Smarter Choices" should be seen as a package of measures tailored to individuals rather than a single all encompassing measure.

3.2 TELECONFERENCING AND WEB CONFERENCING

- 3.2.1 Improvements in communications technologies over recent years have enabled meetings to be held over both the internet and the telephone. Such activities reduce the need to travel but also save costs for businesses.
- 3.2.2 It is standard practise within large forward thinking organisations to use such conferencing facilities and should be promoted to small businesses within Attleborough.
- 3.2.3 At one end of the spectrum, an individual could take part in the teleconference call using the phone on their desk or even a mobile phone. At the other end, video conferencing technology could be employed as well as specific teleconferencing items used.
- 3.2.4 Costs for business could be minimal as facilities such as Skype¹ can be used with a webcam to have video (as well as simply audio or instant messaging) conversations over the internet. I Phones and I Pads have Face Time which again offers video phone calls.
- 3.2.5 The cost of such facilities can range from £10 for a webcam to specialist rooms costing £300,000.
- 3.2.6 Linked to an Area wide travel plan, information about companies who provide such facilities could be provided for businesses and households within Attleborough. Companies who provide such facilities would activity support any promotion of their products and may even offer a discount.

It is recommended that;

- Information on companies who provide web conferencing facilities should be made available through travel plans;
- Companies who offer web conferencing facilities should be approached about any potential discounts or savings that could be offered; and
- Ensure smaller companies are aware of the benefits of Face Time and Skype.

¹ <http://www.skype.com/intl/en/business/>

3.3 WORKING FROM HOME

- 3.3.1 Working from home forms the ultimate measure in reducing the need to travel. Both morning and evening trips associated with a traditional work day are removed from the network. Working from home provides many mutual benefits for both employer and employee and can be linked with flexible working hours that can also help promote a work life balance especially employees who are parents if their child is ill or on school holidays.
- 3.3.2 Current technologies utilising the Internet (as mentioned previously) ensure that working from home is possible and as productive as working in an office. It is often the case that employees can log on to their usual systems from home using tokens that provide random security pass codes. These typically cost around £100.

It is recommended that;

- All businesses and houses in Attleborough should be fully informed of the benefits of working from home.

Case Study box 1: Citrix²

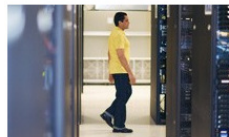
Citrix is software that allows mobile workstyles securely.

Often used with a token that creates a secured pass code, effectively the programmes available in the office are available elsewhere.



For people

Inspiration can strike at any time. When people are free to work anywhere, with anyone, on any device, companies take off.



For IT

Citrix solutions let IT provide a more people-centric, on-demand computing environment. Flexibility and freedom for people, and security and control for IT form the basis for business innovation and growth.



For business

Business has changed forever. Citrix solutions pave the way for business to thrive in the cloud era, embracing mobile users, personal devices, wireless access, app stores, SaaS, and cloud infrastructure.

There is a myriad of products and services provided by Citrix. The needs of individual businesses would vary. Product details are given here: <http://www.citrix.com/products.html>.

- 3.3.3 Whilst smaller firms may not use such software as Citrix, certain tasks, typically office based, can be undertaken at home anyway. Of course this would rely on the use of either the office lap top or home PC and the installation of similar packages that the office uses, such as the Microsoft Office suite of programmes.
- 3.3.4 Working from home should be promoted through travel plans to companies throughout the Attleborough area who can provide such facilities, but also individual employees.

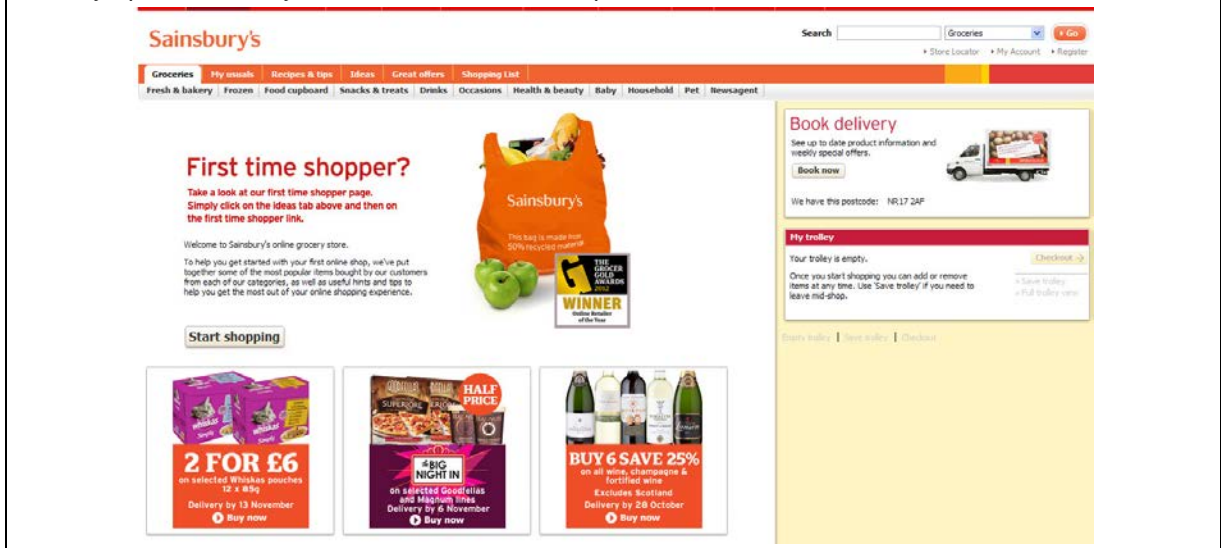
3.4 SUPERMARKET DELIVERIES

- 3.4.1 All major super markets now offer an online delivery service that provides a convenient flexible service for people to complete their shopping whilst not having to visit the super market. The service allows users to identify a convenient time for delivery and whilst there is a charge for the service it is small compared to the cost of completing a journey to the store. The service could reduce the number of trips upon the network at peak times especially during an evening/weekend peak, but also reduces the associated parking pressures.

² <http://www.citrix.co.uk/solutions.html>

Case study box 2: Sainsburys

Attleborough currently has one major supermarket retailer who does offer such a service. Lobbying the supermarket to promote the service locally or offer a discount on the delivery charge may provide an easy option that may result in a reduction in trips.



It is recommended that;

- The local supermarket actively promote and possibly offer a discount for their home delivery service to all customers and residents of Attleborough.

3.5 BETTER BROADBAND

3.5.1 Many of the measures identified in this section rely on having a connection to the internet which demonstrates how important the internet is in trying to achieve a reduction in travel. Smarter choices rely on the user being fully informed of all the possible alternatives for making the same journey by car. Therefore, the internet can be seen as a vital link to achieving this and keeping users fully informed.

3.5.2 Currently forty four thousand connection and the remainder suffer is the first of its kind³, Norfolk County broadband throughout Norfolk to broadband is defined as an internet megabits per second (Mb/s) or

properties across Norfolk do not have any internet from low connection speeds. In a scheme which Council has appointed BT to install “super fast” ensure it is better connected. Super fast connection benefiting from a speed of 24 above.

3.5.3 Therefore, improvements in internet important in growing the local make smarter choices of travel by

connectivity and associated technologies are very economy and helping residents and businesses providing access to services information.

Case Study Box 3: Drogheda,

The town centre will be among the to tap into the ‘smart economy’.

Ireland⁴

first in Ireland to offer blanket wireless access, aiming Local landlords and businesses pitched in to allow the

³ <http://sayyestobroadband.co.uk/>

⁴ <http://www.thejournal.ie/drogheda-rolls-out-town-wide-wi-fi-in-regeneration-drive-291874-Nov2011/>

installation of the service, which it's hoped will help draw shoppers and businesspeople to the economically troubled town centre. Individual businesses clubbed together to provide free wi-fi at a cost of £5,000 plus monthly payments.

It is recommended that;

- Every property and business in Attleborough should have access to super fast broadband;
- Any new development should benefit from connection to super fast broad band; and
- The town centre should benefit from a wi-fi zone / hot spot so internet access is available to all.

3.6 FLEXIBLE WORKING

3.6.1 Whilst not reducing the need to travel per se, the introduction of flexible working for businesses within Attleborough may have a limited impact on the flow of traffic on the highway. Suitable for specific business types such as large offices, it can induce peak spreading reducing the volume of traffic within the traditional traffic peak.

3.6.2 Typically Local Authorities and large companies offer flexible working. There are often core hours were staff are required to be in the office (usually 9:45am to 12:15pm and 2:30pm to 4:15pm) although there are other variations to this working system.

3.6.3 The businesses within Attleborough are site specific based around a core location with set opening hours and mostly of B2 and B8 land uses which, for the most part, are likely to require presence on site. Therefore, flexible working hours may have limited benefit, but should still be encouraged where possible.

3.6.4 It is likely that some businesses and any new business within Attleborough may operate on a shift basis which where possible change over periods should be encouraged to fall outside of peak hours to remove the associated trips on the network. For example 6am to 2pm, 2pm to 10pm, 10pm to 6am.

3.6.5 Flexible hours and home working should be promoted through an area wide travel plan to companies throughout Attleborough who can provide such facilities.

It is recommended that;

- Benefits and information on flexible working hours are promoted to all business within Attleborough; and
- New businesses where possible should be encouraged to offer flexible working.

3.7 CONCLUSION

3.7.1 Whilst many ways of reducing the need to travel rely on technology and Broadband, there are solutions which do not necessarily cost too much.

3.7.2 Many of the options discussed in this section would be integral to Business Travel Plans as discussed in more detail at section X.

Key recommendations for reducing the need to travel are:

- Ensure businesses are aware of the benefits of teleconferencing and video conferencing.
- Ensure businesses and residents are aware of the benefits of working from home and understand how this can be done, if appropriate to their business.
- Sainsburys promote their delivery service, with potential discounts.
- Continued support for super fast Broadband with lobbying to ensure Attleborough is considered early on.

- The town centre should benefit from a wi-fi zone / hot spot so internet access is available to all
- Businesses should be aware of the benefits of flexible working.

4. Active Travel - Walking and Cycling

4.1 INTRODUCTION

- 4.1.1 Walking and cycling form the most important mode of transport as they can replace short journeys by car. Walking provides the means of connecting people with other modes of transport. Indeed all journeys, regardless of mode of transport used involve an element of walking. When car users leave their cars for example, they become pedestrians.
- 4.1.2 Walking and cycling are active modes of travel. Making everyday journeys by foot or by bicycle is an easy way to increase the amount of physical activity in people's daily routine. Walking and cycling are cheaper, healthier and more enjoyable ways to get around.
- 4.1.3 Walking and cycling have little, if any, impact on carbon emissions. They are modes of transport which do not emit carbon dioxide or other greenhouse gases.
- 4.1.4 Yet levels of walking are very low, especially when compared to the National average (see accompanying Baseline Report). And whilst cycling levels are higher than the national average, the town's topography and compactness lends itself to being conducive to cycling.

4.2 DESIRE LINES

- 4.2.1 Pedestrians and cyclists wish to travel in the most direct route as possible to get somewhere, sometimes even willing to take some risks or even flout laws as shows in figure x. There are also well used routes to get to popular destinations.

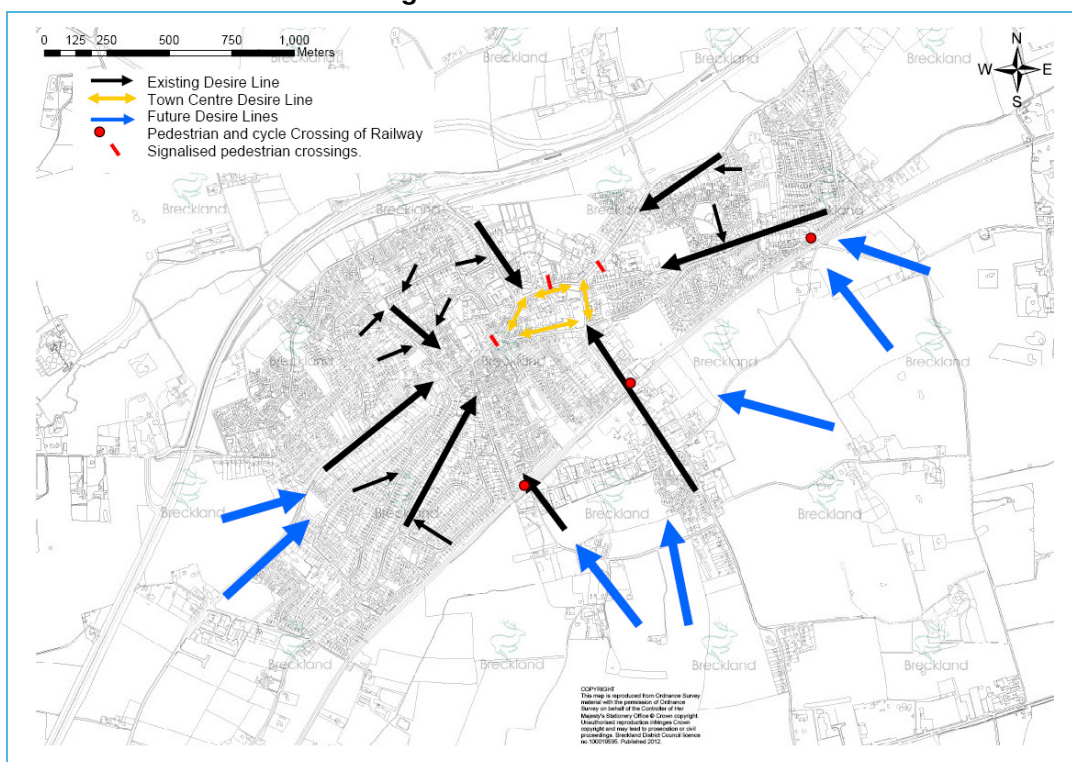
Figure 3 A cyclist cycling on the footway, contra to the flow of permitted traffic. Showing a desire line along Connaught Road.



- 4.2.2 To the north of the train line, the desire lines congregate on the town centre from the surrounding residential dwellings through the minor road network. It is possible to gain access to the town centre and gyratory via the minor road network which is encouraging for less confident cyclists, but journeys by bike crossing the town have to use the main roads of the gyratory.
- 4.2.3 Due to the constraints of the train line, desire lines from and to south of the railway follow the two main crossing points of the level crossing on the B1077 Station Road and Leys Lane pedestrian crossing point.
- 4.2.4 Journeys on foot can be made with ease through the residential areas with several off highway footpaths located throughout the residential areas. Once residential areas are left, in the main, the desire lines for pedestrians follow the B1077 as it provides the most direct route to the town centre.

- 4.2.5 Within the town centre, desire lines follow footways along high street, Exchange Street and Church Street. High footfalls on footways either side of the aforementioned roads were observed during site visits. Key amenities and services such as the Post Office, Superstore and various shops are located in this area and so the links between are important for pedestrians. The town centre car park and on-street parking further cement the importance of the desire lines along the footways of Exchange and Church Street providing links for shoppers from their vehicles.
- 4.2.6 Given the location of the train station, Station Road forms a key desire line for journeys to and from the town centre and industrial units to the south of the station.
- 4.2.7 Figure x seeks to show the desire lines in the town now, as well as with the new development. It is the aim of the walking and cycling network to provide routes as close as possible to these desire lines.

Figure 4 Desire Lines in Attleborough.



4.3 ATTLEBOROUGH'S PROPOSED WALKING AND CYCLING NETWORK

- 4.3.1 A walking and cycling network has been produced for Attleborough. This seeks to include as many destinations and origins in the town as possible. The destinations include employment areas, supermarkets, the town centre, schools and the library. The key desire lines as discussed in the previous section have influenced the proposed network.
- 4.3.2 Not all routes form the network; rather the main routes and roads that have other routes feeding onto them. It is intended that once on the network, destinations will be signed coherently with time to destination for walking and cycling information displayed.
- 4.3.3 The network shown at x does not show areas for improvement. Areas for improvements are shown at x. The related improvement schedule, which gives more detail for the proposed intervention as well as the cost, is at x.
- 4.3.4 A key element of the work was linking villages and other origins and destinations up to 4 miles from Attleborough to the town by cycling. This is shown at figure x. Again, this shows the network with the areas for improvement shown at x.
- 4.3.5 With regards to the network linking in surrounding destinations and origins, it is likely that only more confident cyclists will use these routes on a regular basis and probably only in the lighter months of the year that also offer better weather.

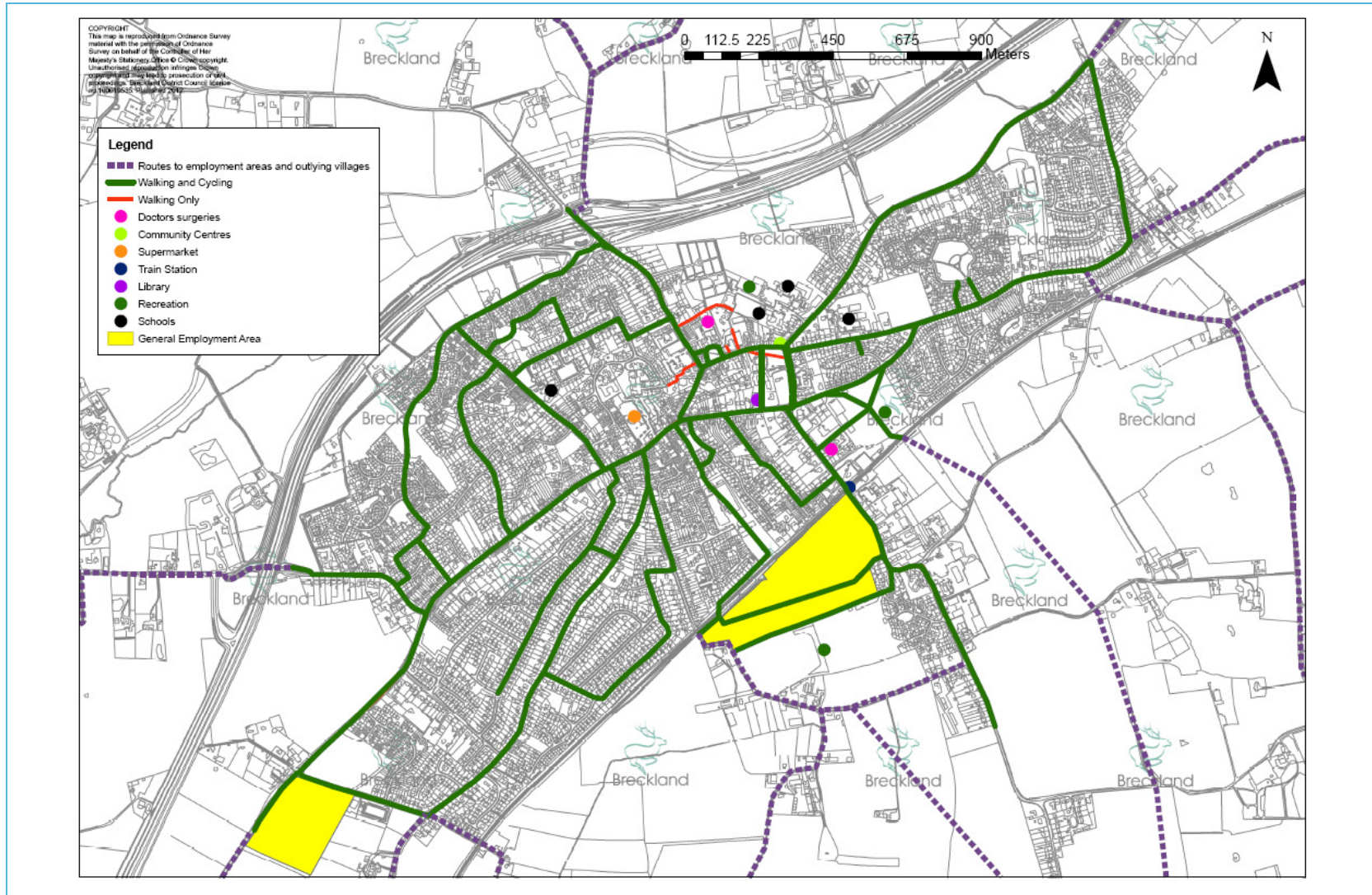
- 4.3.6 It is intended that the routes follow the 5 Cs⁵:
- **Connected** It must be easy to walk from place to place without encountering dead ends or difficult road crossings;
 - **Convenient** Routes need to be direct without unnecessary detours; shops, jobs, services and homes need to be as close together as possible;
 - **Comfortable** Footway and footpaths need to be well maintained and wide enough, well lit and to offer shelter and resting places;
 - **Convivial** Pedestrian routes need to be friendly, attractive, interesting and litter free; and
 - **Conspicuous** Pedestrians need to be acknowledged as a form of traffic, and they need to become significant in people's minds. Pedestrian facilities and the places people want to reach on foot need to be clearly identifiable and well sign posted.

4.4 PROPOSED INTERVENTIONS

- 4.4.1 A schedule of interventions can be found at xxx. This gives a description of the intervention, text to give more detail, prioritising as well as broad costings. It should be noted that the costs are based on our experience of producing a bill of quantities based on common rates. The quotes are towards the top end of what would be expected and are estimates. Design fees are not included, although if Capita Symonds were commissioned to design schemes, design fees would be approximately 15% of the total construction cost. It is likely that this percentage would be higher if other organisations were commissioned.
- 4.4.2 The scale of interventions varies from a scheme to educate shop owners to prevent displays or 'A' boards from blocking the footway to new shared use bridges over the railway. In some cases the cost is to convert routes to bridleways to allow cycling; in other cases there are physical interventions suggested such as the provision of a new crossing to help pedestrians or the provision of a new footway.
- 4.4.3 Each intervention is also assessed in terms of priority and likelihood of deliverability. With regards to likelihood of deliverability, this reflects whether the scheme could face no real issues or is unlikely to be trouble free. For example, conversion to a bridleway could be attractive to some farmers, but as part of the negotiations they could request that the accesses to the bridleways be maintained by the local highways authority to save them time and effort.
- 4.4.4 Some of the proposed interventions are located in the town centre. The proposals identified are stand alone, but need to be considered holistically with other changes to the town centre and form part of the package of improvements for the town centre. So whilst presented in this report, the Town Centre Report team are also aware of the proposals. See xxx.
- 4.4.5 It should be noted that the proposals have not been subject to Safety Audit.

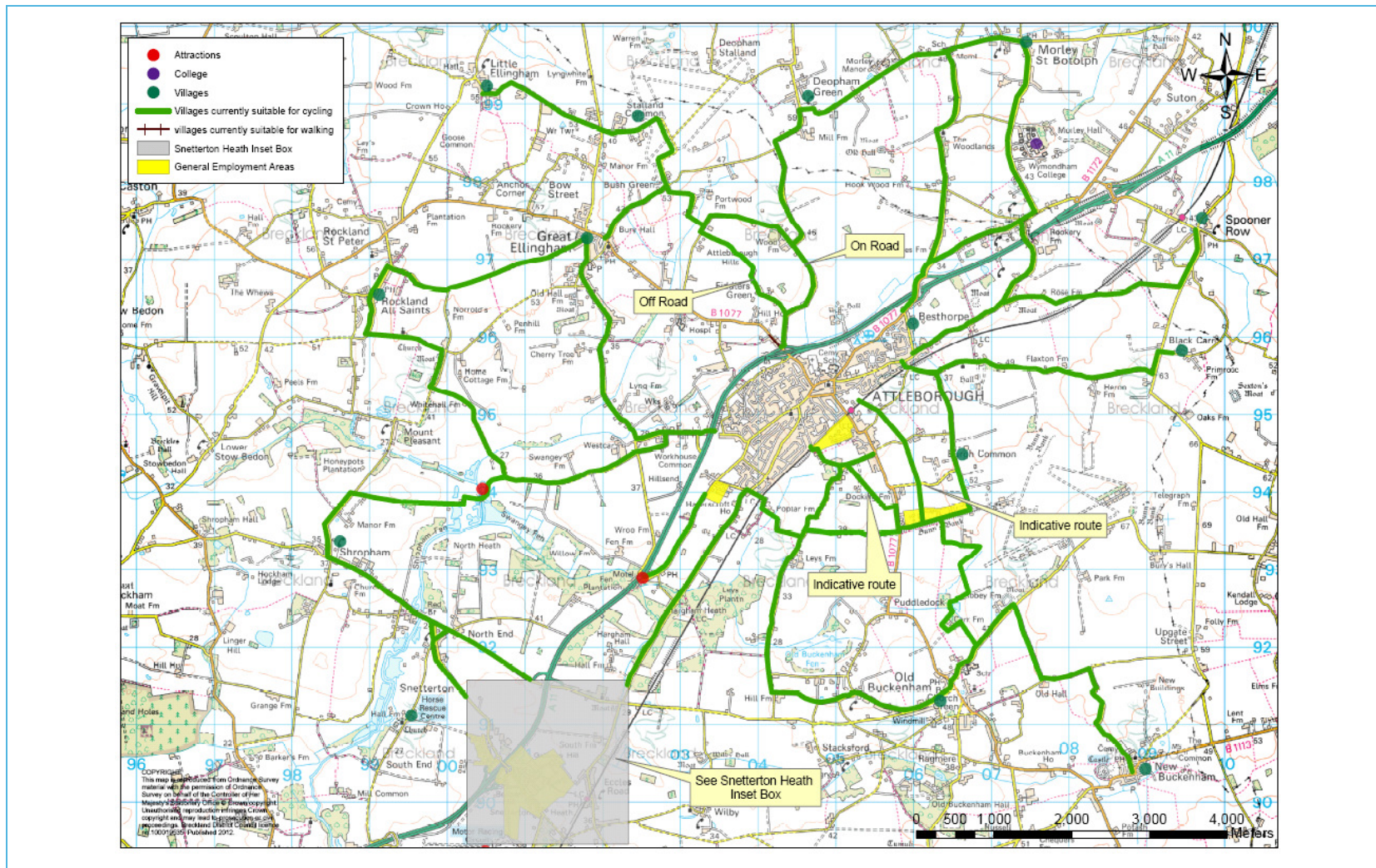
⁵ Active Travel Action Plan, City of Edinburgh Council.

Figure 5 Attleborough's Walking and Cycling Network.



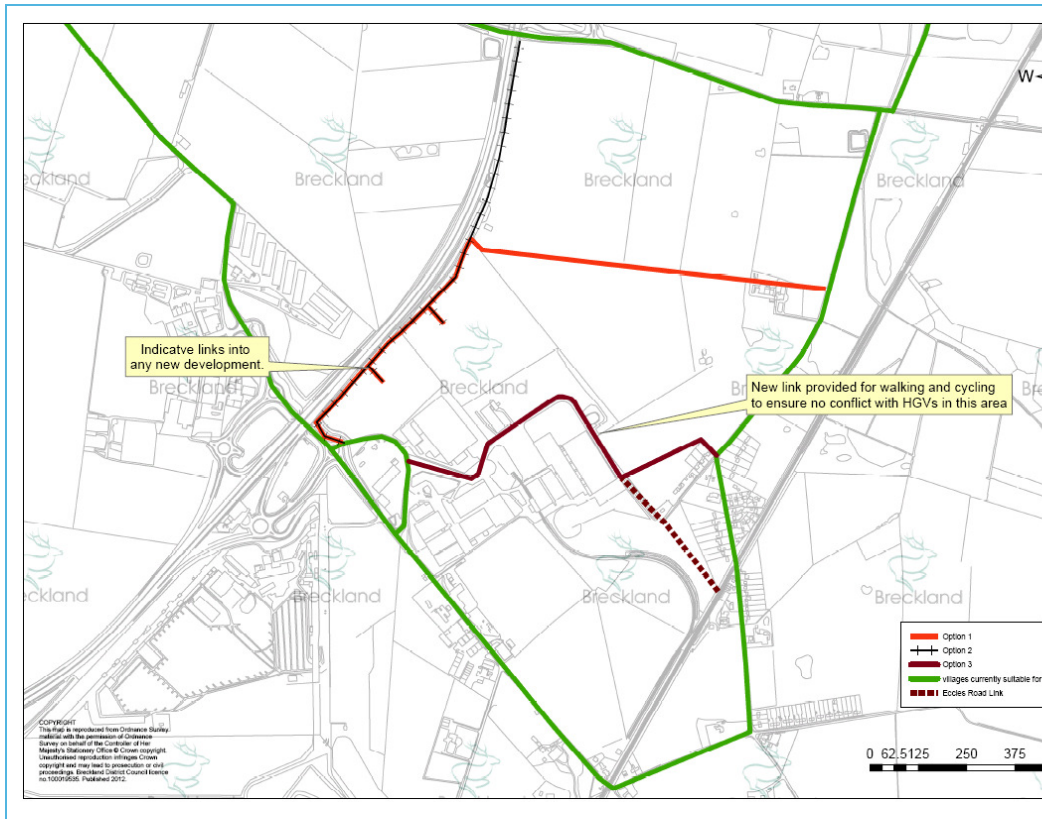
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Figure 6 Linking in Nearby Villages and Employment Areas to Attleborough



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Figure 7 Snetterton Heath Inset Box



4.5 CROSSING POINTS

4.5.1 As a result of site visits, as well as the meetings with local residents, it is apparent that residents in the area could benefit from more formal crossing arrangements in the town centre. Figure xxx shows the proposed new crossing and proposed improvements to crossings, which are described below with greater detail at section xxxx

- X1 – identified as a key desire line by the residents of Hollycourt.
- X2 – with two lanes of one way traffic and the library being a destination on the walking and cycling network, a crossing here would be of great benefit.
- X3 and X4 – site observations concluded that often the courtesy crossings did not always work, i.e., drivers seemed to not regularly stop for waiting pedestrians.
- X5 – with the residential areas and town centre on the other side of Station Road and the surgery, Connaught Hall, Health Centre on the other, a crossing here would be of benefit. It also has the potential to help those crossing the road to get to a certain platform at the Railway Station.
- X6 – site observations concluded that a crossing here between the destinations of the Infant School rear entrance, Barclays Bank, other services on Church Street as well as the main car park would be of benefit.

4.6 CYCLE PARKING

4.6.1 Cycle parking is a key element to promoting cycling. Given the value of modern bikes improved cycle parking is a must for encouraging journeys by bike.

4.6.2 Cycle parking should be of a user friendly style (such as Sheffield Stands⁶), be placed in a convenient location (otherwise cycles will be locked to lamp posts or railings) and be in areas of either CCTV or natural surveillance (to deter vandalism and theft). It is also preferable that cycle parking be under shelter.

4.6.3 Figure 8 shows the recommended locations for improved cycle parking provision. Appendix X gives further details and also includes costs.

- P1: This is outside the Police Station. This has been identified as a destination on the Walking and Cycling network and does not have cycle parking for visitors currently.
- P2: This is outside the Post Office. There was evidence of cycles being lent against railings. Cycle parking in this location offers opportunities for leaving the bicycle whilst other shops in the area are visited – linked trips.
- P3: This is outside Lloyds Bank. Again, offers the opportunity for leaving the bicycle at this location whilst visiting other shops in the area. Note that whilst this is a potential location for cycle parking, the Town Centre work will offer the opportunity for enhanced cycle stand provision around the town and as part of that work this location may or may not be taken forward.
- P4: This is outside Lidl. There is no obvious cycle parking facility provision at Lidl and cycles were seen leaning against railings.
- P5: This replaces the existing provision in the main car park with user friendly format, although see P3 re town centre work.
- P6a (High School), P6b (Infant School), P7 (Junior School), P12 (Chapel Road): Review provision at schools to ensure adequate cycle parking of Sheffield Stand format for staff and pupils.
- P8 (Health Centre), P9 (Connaught Hall), P10 (GP Surgery): Provide new Sheffield Stands in convenient location with shelter. There is no provision currently.
- P11a: Norwich Bound Platform at the Railway Station. Move the existing cycle parking (4 stands) and adding 4 more Sheffield Stands to create 8 stands in a better surveyed area, with shelter.
- P11b: Cambridge Bound Platform at the Railway Station. Provision of a further 5 or 6 Sheffield Stands with shelter.
- P13: Outside Londis, there is currently concrete tyre holder style cycle parking. This is not user friendly and could usefully be replaced by Sheffield Stands.

4.7 FOOTWAY PARKING

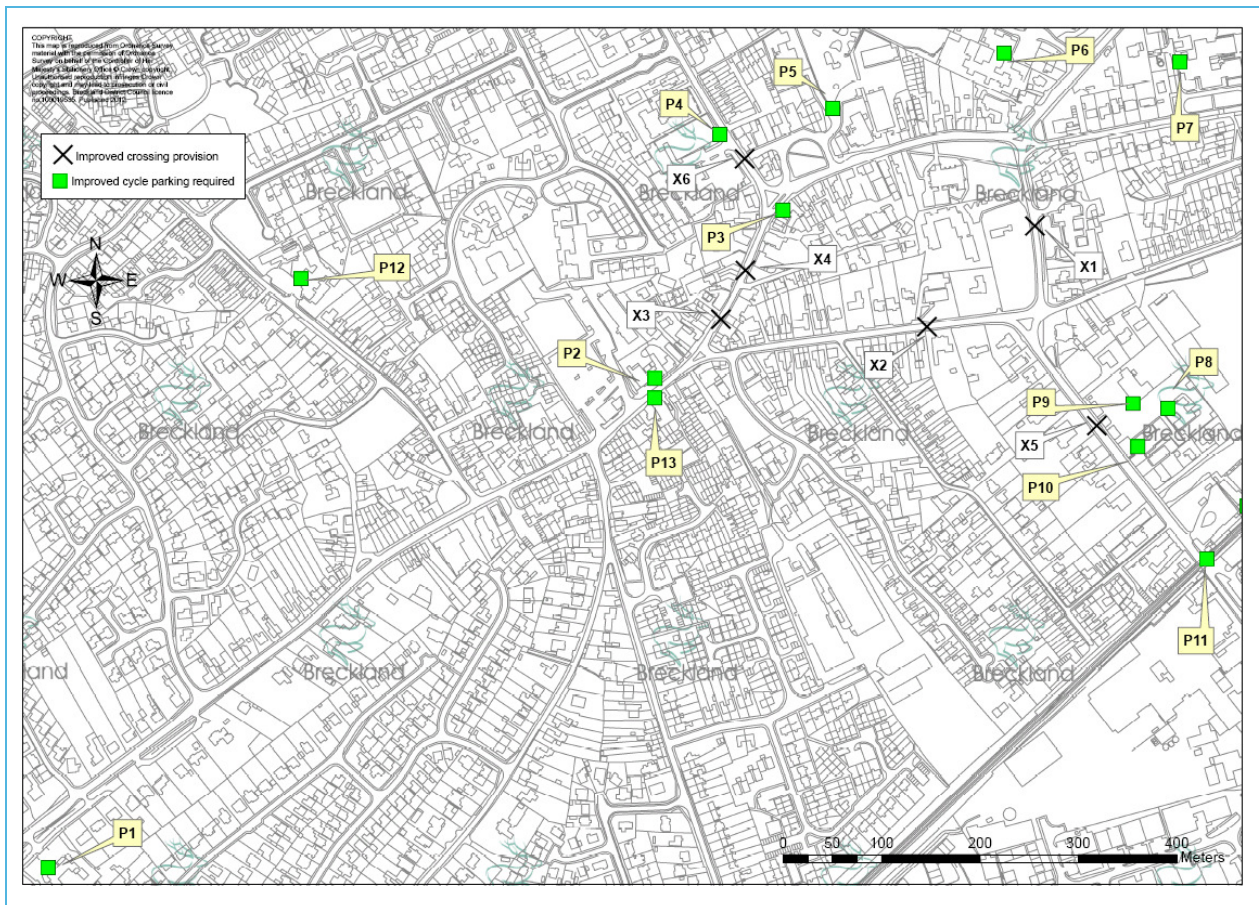
4.7.1 Parking on the footways, by delivery vehicles or cars, reduces the width of the footway, inconveniencing pedestrians. Whilst this is a national problem, there could be an element of the consideration campaign that seeks to tackle this locally.

4.8 CLUTTER

4.8.1 Some specific areas that could benefit from de-cluttering have been identified in the schedule of improvements (appendix x), but the town could benefit from a town-wide assessment. In the town centre, this would benefit the streetscape, especially as it is a Conservation Area.

⁶ Sheffield Stand cycle stands are favoured in this assessment and report as bicycles can be lent against them with confidence that the bicycle is unlikely to fall over, as well as enabling the bicycle to be locked to the stand in many ways. Tyre grabber style cycle stands offer little support to the bicycle other than holding part of the wheel which could potentially lead to a buckled wheel. There are very limited ways to secure a bicycle to these types of stands, other than through the tyre. Furthermore, modern bicycles often have quick release mechanisms on both the front and rear tyres which users tend not to change. Sheffield Stands offer the opportunity to secure a lock through both wheels, the frame and the stand to deter theft of the entire or part of the bicycle.

Figure 8 Locations for Improved Cycle Parking and Crossing Points



4.9 GUARDRAILS

4.9.1 Whilst intended to protect pedestrians, these do often reduce the width of the footway available. Some individual railings are suggested to be reviewed as part of the schedule of interventions.

4.10 MAINTENANCE

4.10.1 This could range from cutting back overgrown vegetation, repairing broken signs, filling in potholes or sweeping up broken glass. In order to make the network attractive, regular maintenance is essential.

4.11 FUTURE GROWTH

4.11.1 Given that detailed layouts have yet to be designed for any future residential dwellings, it is difficult to identify the specific walking and cycling infrastructure needed. That being said, infrastructure and routes should look to provide connectivity to the crossing points over the train line, specifically the Leys Lane crossing which is proposed to benefit from a pedestrian foot bridge. Infrastructure should also link in with the proposed walking and cycling network.

4.11.2 With respect to standards, the following should be considered when designing and developing the movement network of the urban extension in relation to pedestrians and cyclists:


- i Be coherent, safe and attractive
- ii Provide continuity to destinations and link in with the walking and cycling network for the existing town.
- iii Encourage Active Travel⁷

⁷ <http://www.sustrans.org.uk/what-we-do/liveable-neighbourhood>

- iv Provide correct tactile paving at crossing points, whilst considering the needs of wheelchair users.
- v Ensure dropped kerbs are on desire lines, especially at junctions.
- vi Avoid overly wide junction visibility splays.
- vii If fencing is required, it should not result in a feeling of oppression.
- viii Lighting should be adequate to make users feel safe, but not add to light pollution.
- ix Benches should be provided at convenient locations.
- x If railings are deemed absolutely necessary, they should not narrow footways or cause obstruction.
- xi If barriers are deemed absolutely necessary, they should not unduly obstruct bonafide users such as cyclists, mobility scooter users, wheel chair users and those pushing push chairs.
- xii Crossing points should benefit from excellent drainage
- xiii The routes should benefit from regular thorough maintenance (for example cutting back of vegetation as it encroaches routes and clearance of broken glass which can cause punctures)
- xiv Routes would benefit from the provision of public art⁸
- xv Cycle parking should be provided at key destinations and be user friendly, provided in a convenient location, benefit from good surveillance, be it CCTV or natural, and have a shelter.

4.12 GETTING MORE PEOPLE WALKING AND CYCLING

4.12.1 The following are projects or schemes that have the potential to get more people walking and cycling.

- i **A coherent, user friendly and safe walking and cycling network.** The network as shown at  links in the key destinations and origins in the town and the wider area. Delivery of the proposed interventions will improve the attractiveness of the route to would be walkers and cyclists.
- ii **Signage.** Coherent signing of the walking and cycling network will help residents and visitors a like get around the town. Showing typical time to get to the destination could help residents choose cycling and walking as preferred modes of travel for some journeys.
- iii **User friendly, well located cycle parking.** Having a convenient, user friendly place to park one's cycle is important if more people cycle around. Locations for improvements have been identified and broad costings given.
- iv **Consideration of the needs of disabled people.** Be it surfaces with no trip hazards, the provision of dropped kerbs, correct tactile paving (that does not inconvenience people in wheelchairs) or A Boards not blocking the highway, there are various ways to make walking around the town attractive to all.
- v **Cheaper bikes.** The cost of a bicycle could be prohibitive to some. The Green Ventures scheme that currently operates in Thetford could be expanded to include the Attleborough area. The supply of bicycles is a key issue to consider however. The backing of landfill operators in the area is currently being discussed. Furthermore, another key consideration is any impact on the existing bicycle business in Attleborough. There could be merits in their involvement in the scheme and the business could also benefit from more bicycles in the area needing repairing or accessories.

⁸ <http://www.sustrans.org.uk/what-we-do/art-and-the-travelling-landscape>

Case Study Box: Green Ventures.

In Thetford, the Green Ventures scheme, initially funded by Thetford Healthy Town, now through financial sales, takes unwanted bikes donated to the scheme or diverted from landfill. To date, 43 tonnes of bicycles have been diverted from landfill. A qualified mechanic checks and mends the bicycles that are then sold for a price that is cheaper than a tank of petrol. A workshop and sales area is located in the town with part time opening hours to the public.

- vi **Subsidised bike scheme.** Also due to start in the Thetford area is a subsidised bicycle scheme whereby secondary school pupils who are entitled to free school meals are given £50 to the cost of a bicycle. Such a scheme could help bicycle use in the Attleborough area.

Figure 9 A subsidised bicycle scheme in Thetford

Subsidised bike scheme launched

By **DOMINIC BAREHAM**
dominic.bareham2@archant.co.uk

An initiative was launched last week to encourage children in a deprived part of a Norfolk town to cycle to school by offering discounts on the cost of recycled bikes.

South West Norfolk MP Elizabeth Truss gave a speech at the launch of the Subsidised Bike Purchase Scheme at Thetford Academy, which is funded by the academy and healthcare provider NHS Norfolk and Waveney and Green Ventures bike shop in Brunel Way, Thetford.

The unique project, which could be rolled out across the county, will enable all the academy students to get a 10pc discount off the price of a new

bike and a 25pc discount on accessories and repairs from social enterprise Green Ventures, which specialises in recycling used bikes donated by the public.

Carol Doherty, a public health officer with NHS Norfolk and Waveney, said there may be some children who lived three miles away from the school, but did not want to catch the bus and the bikes would provide them with a healthy alternative to get into school.

She added: "I think it is a mixture of having facilities there, but also individual attitudes. We are trying to influence people to consider walking or cycling, but also trying to help those who need a helping hand to fulfil that goal and that is what we are there for."

The academy currently has two sites - a north and south campus - but all its

students will be based at the north campus once its new building has been completed by September 2013.

Cathy Spillane, the academy's principal, said: "We are aware of concern from some parents about the increased journey for their children in travelling across town to our North Campus so we are pleased to be able to provide some help to pupils to buy a bike or safety equipment."

"The academy has already provided support by subsidising a bus service and this partnership initiative will provide students with an alternative means to get to school and promote healthy living."

Pupils who are entitled to free school meals will also be given a £50 voucher towards the cost of buying a bike, funded jointly by the academy and NHS Norfolk and Waveney.

- vii **Fun events.** Events that use bicycles for uses other than commuting could benefit cycle usage in the town. For example guided cycle rides in the area, treasure hunts by bike or challenges such as raising money for charity. Guided walks could also prove popular.
- viii **Bike maintenance.** Perhaps many people get a puncture or their chain breaks and they either don't get around to fixing it or do not know what to do. Dr Bike sessions, be they free to users or fairly cheap, could help get some bikes back on the road. Perhaps an annual event held at different locations around the area.
- ix **Bikes on buses.** See section x. This could benefit longer journeys rather than journeys around the town. This would help integration between the Smarter Choices modes.
- x **Bike Security.** Regular sessions which code bikes to deter theft could be run regularly by the Safer Neighbourhood Team. This could be offered to any bicycle sold by the existing business in the town.
- xi **Taking part in the national walking and cycling days.** There are many campaigns and national events, run by different organisations ongoing or held annually. Bike to Work Week in June⁹, National Walk to Work Week in May¹⁰, Commute Smart Week held in November¹¹ and Walk to School Month¹² held each October.
- xii **Take part in National Campaigns.** Some examples are listed below.
 - Fill that hole¹³!
 - State of Our Streets Awards¹⁴.

⁹ <http://www.bikeweek.org.uk/>

¹⁰ <http://www.livingstreets.org.uk/walk-with-us/events/walk-to-work-week>

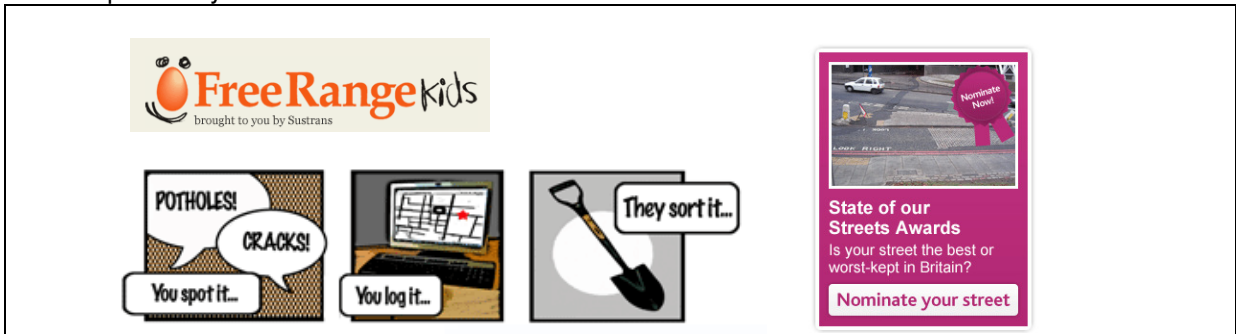
¹¹ <http://www.workwiseuk.org/commutesmartweek/>

¹² <http://www.sustrans.org.uk/resources/in-the-news/international-walk-to-school-month>

¹³ <http://www.fillthathole.org.uk/>

¹⁴ <http://www.livingstreets.org.uk/sosawards>

- c. Free Range Kids¹⁵. Helping children have the confidence, skills and support to travel independently and feel free from their front door.



- xiii **Considerate road user campaign.** A key element of the Smarter Choices Vision is for road users to be considerate of each other. It is evident in recent consultation with residents that this is a reoccurring theme. For example car drivers could be considerate on Exchange Street and allow pedestrians to cross the road and cyclists could be more considerate of pedestrians when using the shared use on Station Road. There is a similar campaign which could be used in the area called SMIDSY (Sorry mate, I didn't see you. <http://www.stop-smidsy.org.uk/>), but a town wide campaign for all users could be a key element of the Smarter Choices Work.
- xiv **Road Safety Training.** If deemed a desirable course to offer, as part of the campaign for considerate road users, suitable parental and community support in delivering Level 2 cycle training could be sought and consequently the Level 2 course delivered. The potential for offering Level 3 cycle training to students in the early years at High School could also be investigated.

Cycle Training in Attleborough.
 Attleborough Junior School offers level 1 cycle training. Level 2 is difficult to deliver due to lack of volunteers to help supervise training. The Junior School is willing, but need community or parental help. Level 3 is not offered as there is not a great demand and Norfolk County Council does not offer this course. Level 3 is offered by private providers to whom NCC refer any interested parties.

The Infant school do pedestrian training but not cycle training as it is considered the pupils are too young for the courses on offer. The Infant School is self sufficient in training – teaching assistants deliver the course.

There is no pedestrian training at the junior school. But there are classroom based presentations to build on foundation of practical sessions delivered in the infant school.

There is no cycle or pedestrian training at the High School. The take up at that age is limited. There is a course on offer for those with special needs of High School age.

- xv **Cycle and walking buddi.** An issue which may deter some people is walking or cycling alone. This could reflect fears for personal safety or lack of confidence. As part of the Smarter Choices Strategy for Attleborough, the buddi schemes and websites could be promoted, particularly as part of Travel Plans. <https://bikebudi.liftshare.com/> and <https://walkbudi.liftshare.com/>



¹⁵ <http://www.sustrans.org.uk/freerangekids/about-free-range-kids>

xvi **Dedicated Officer Time.** Experience, especially by Sustrans has shown that dedicated officer time in promoting walking and cycling can have great benefits in modal shift towards active travel modes. For example Sustrans' Bike It has 80 expert cycling officers in over 1,400 schools, helping over 380,000 children cycle safely to school. Bike It Officers work with children in schools to give them the skills and confidence to travel under their own steam, and their parents and teachers the peace of mind to let them. They work towards creating a pro-cycling and walking culture in the school community, inspiring children and their parents to get involved and generating positive publicity, with far-reaching benefits beyond the school gate



xvii **Making people aware of the benefits to their health and their wallet and potentially time taken for some journeys.** With driving costs increasing and, as shows in the baseline report, around a quarter of the local population not being of a healthy weight, active travel modes will be of benefit. These messages could be key to the marketing of Smarter Choices.

4.13 CONCLUSION

4.13.1 The flat topography and small size of the town ensures journeys by walking and by bike offer a real alternative to car borne journeys. The lack of infrastructure (such as cycle parking and crossing points) and little promotion of these modes of transport results in few journeys by bike and walk locally.

The key recommendations for promoting walking and cycling:

- Delivery of the walking and cycling network within the town.
- Delivery of cycling routes to Snetterton Heath and Bunn's Bank in the first instance.
- Complete a de-cluttering exercise.
- Sheffield Stand cycle stands at:
 - *New cycle parking provision outside Lidl
 - *At the Railway Station, moving the existing cycle parking (4 stands) from the side of the railway building on the Norwich Platform to either the car park (as improved) or onto the Norwich bound platform. Add 4 more Sheffield Stands to give 8 in total (room for 16 cycles) with shelter.
 - *Ensure Sheffield Stands are provided throughout the town centre at convenient locations¹⁶.
 - *Sheffield Stands at each business employing 10 or more staff around Attleborough and Snetterton Heath, in a convenient location, with shelter.
- Ensure the areas of future housing and employment growth are cycle friendly and link to the town cycle network in a coherent way (see section x)
- Walking and cycling are promoted through the schemes listed at section x

¹⁶ See Town Centre Study.

5. Public Transport - Bus

5.1 INTRODUCTION

5.1.1 According to the 2001 Census, only 1.93% of people in Attleborough used the bus for their journey to work. This is lower than District, County, Regional and National average.

5.1.2 In order to attract passengers, 'public transport must satisfy travellers' requirements; it must serve routes that link the principal origins and destinations of trips, offer a high frequency service, be reliable and quick, use high quality vehicles and staff and be affordable. To be viable services must not incur ongoing costs greater than its revenue. The location and layout of a development must seek to minimise costs of public transport operation and to maximise revenue potential. The quick journeys required by bus passengers and the minimisation of bus miles required by operators are both achieved by routes that are direct and which avoid delays according to congestion.¹⁷

5.1.3 This section of the report sets out the existing facilities/services that serve the Attleborough area, and outlines proposals for future provision to support development proposals.

5.2 PLANNING CONTEXT

5.2.1 The Breckland District Council Core Strategy and Development Control Policies Development Plan Document states that, "*Improvements to public transport networks will be encouraged and the essential infrastructure for their operation will be delivered through the transport authority and contributions levied from significant development.*"

5.2.2 Connecting Norfolk, Norfolk's Transport Plan for 2026 identifies that significant growth in housing and jobs is planned for Attleborough and recognises the challenges of supporting such growth. With regard to bus services the document sets out that the County Council's role will be to enable the private sector to continue enhancing services on the existing core network of commercial bus services with a focus on achieving:

- Reliability, punctuality and regularity of services;
- Journey times between key settlements that where possible allow 'there and back in half a day' by public transport;
- A high standard of public transport vehicles and infrastructure, including interchange facilities within the centres;
- Accessibility for all.

5.3 THE VISION FOR PUBLIC TRANSPORT

Public Transport will become the obvious choice for journeys that cannot be undertaken by walking or cycling by the whole of the community.

Bus services will be greatly improved and meet the needs of the entire town's residents as well as the nearby villages that rely on the services Attleborough provides. It will be easier to travel to more destinations (such as the Norfolk and Norwich hospital) more frequently and on quality buses. Convenient Sunday bus travel will be available to all residents.

The train will be used more for both people and freight, but the impact of the train passing through the town will have reduced with the automated crossing on Station Road. The railway station will be a hive of activity with greater use of the existing (listed) buildings being used appropriately and car and cycle parking improved.

¹⁷ Page 8. Guidelines for Planning for Public Transport in Developments, IHT, 1999

- 5.4 THE CURRENT PROVISION IN THE AREA – ISSUES FOR PROVIDERS TO CONSIDER
- 5.4.1 It is acknowledged and understood that the existing services in the area operate privately and on a commercial basis. Whilst there may be reasons for the services running the way they do and the times they do, this section of the report seeks to assess the current services and suggest potential amendments that the Councils may wish to raise with providers. The exercise identifies changes to be considered for a particular service. It could be that NCC is involved in ‘coordinating’ the provision with all operators involved.
- 5.4.2 It should be noted that it will probably not be appropriate to take forward all the suggestions as making an amendment to one particular service could address a certain issue without the need for any other changes.
- 5.4.3 *A (WHIPPET COACHES).*
- Starts: Great Yarmouth. Ends: Cambridge.
 - Whilst operating on weekdays and Saturday, there is one service a day.
 - It departs Cambridge at 9am in the morning and departs Great Yarmouth at 4:15pm in the afternoon.
 - The journey between Norwich and Attleborough is 20 minutes. As it takes about 25 minutes to drive, this bus route would be attractive for this journey. It also goes into a different part of Norwich than the train (the City Centre).
 - The journey between Attleborough and Thetford is 20 minutes. It takes about 25 minutes to drive. This bus route would be attractive for this journey.
 - The journey between Attleborough and Cambridge takes 80 minutes. The train takes 60 minutes and it takes 51 minutes to drive. The bus route is unlikely to be attractive for the entire journey when compared to alternatives, although it may be cheaper than the train.
 - There is no Sunday service.
- 5.4.3.1 The length of time for journeys between Attleborough and Norwich and Cambridge are such that service A is an attractive service. However, it only has one service in the week and Saturday and none on Sundays.
- 5.4.3.2 Consideration could be made to provide this route, or the Thetford, Attleborough and Norwich element of the route, more regularly throughout the day, maintaining the timings between destinations. There could also be some provision on a Sunday. The route could be promoted as being direct and non stop between the centre of Thetford, Attleborough and Norwich. There could be potential for some of the services to travel via the Norfolk and Norwich University Hospital to enable visits at visiting times (which is 2-4pm and 6-8pm for most the wards) and along Earlham Road, although it could be that the 13 and 6 services could be more suited for taking in the hospital. There could also be merits in additional stops on Norwich Road and London Road which would allow more of the resident population of Attleborough to be within 400m walking distance of a bus stop, although this would need to be weighed up against any impact a slight increase to journey time which could result.
- 5.4.4 *6A AND X6 (KONNECT)*
- Starts: Norwich City Centre. Ends: Great Ellingham.
 - This service offers 2 services an hour.
 - From Norwich to Attleborough, at the start of the day, the gap is 30 minutes, however later on and until the end of the day, the gap is 20 minutes then 40 minutes. For the return leg, the gap is 30 minutes.
 - The service is mainly a direct service between Norwich and Attleborough, stopping occasionally in between.
 - Not all services go to Great Ellingham
 - Travel time between Wymondham and Attleborough is 13 minutes. To drive is around the same time.
 - Travel time between Norwich and Attleborough is between 28 and 33 minutes. To drive is 28 minutes.
 - The Saturday and weekday timetable is the same.
 - No service on a Sunday.

- 5.4.4.1 The length of time for journeys between Attleborough, Wymondham and Norwich are equivalent to driving.
- 5.4.4.2 Consideration could be made to extend the route to Great Ellingham more regularly throughout the day. There could be benefits to providing later services, or perhaps only on Thursdays, Fridays and Saturdays. There could be potential for some of the services to travel via the Norfolk and Norwich University Hospital to enable visits at visiting times (which is 2-4pm and 6-8pm for most the wards) and along Earham Road (although see 13A).
- 5.4.5 **13, 13A, 13B (FIRST)**
- Starts: Attleborough, Leys Lane. Ends: Spixworth.
 - Travel time from Norwich to Attleborough is 45 minutes which is longer than driving.
 - There are 3 buses an hour between 7am and 8am.
 - There is a late bus on a Saturday from Norwich at 11pm which takes over an hour.
 - 13A includes the hospital but late evening/night only.
 - On Sundays it is possible to get the bus to and from the Norfolk and Norwich Hospital for the evening visiting times of 6pm to 8pm.
- 5.4.5.1 Consideration could be made to the 13A operating throughout the day, especially for the afternoon and evening visiting times at the hospital. The later bus could also operate on Thursdays and Fridays, although taking an hour may not be attractive to some.
- 5.4.6 **13C (FIRST)**
- Starts: Attleborough, Queen's Square. Ends: Spixworth.
 - The route travels in the AM and PM peak hour towards and from Attleborough.
 - The route takes in Wymondham College and Morley St Botolph
 - The travel time between Norwich and Attleborough is 1h10m which is not likely to be attractive when compared to the car or train.
 - The travel time between Wymondham and Attleborough is between 32m and 35m which is not likely to be attractive when compared to the car or train.
- 5.4.6.1 The route is likely to benefit students who travel from Wymondham and Norwich to Wymondham College, but not for Attleborough Students who attend the college. Consideration could be made of providing a service on the same route, at the same time, in the opposite direction to benefit trips by Attleborough students to Wymondham College. There could also be merits in additional stops on Norwich Road and London Road which would allow more of the resident population of Attleborough to be within 400m walking distance of a bus stop although this would need to be weighed up against any impact a slight increase to journey time that could result.
- 5.4.7 **26 (EAGLES COACHES)**
- Starts: Norwich City Centre. Ends: Watton.
 - One service during the week.
 - Departs Watton in the morning and departs Norwich in the early afternoon.
 - Does not pass through Attleborough but goes through Great Ellingham
- 5.4.7.1 Consideration could be given to diverting the route into Attleborough to then carry on along the A11 to Norwich. This would link Great Ellingham to Attleborough too (although see 6A and X6). Although this would only be of real benefit if the service was more frequent in both directions.
- 5.4.8 **66 (COACH SERVICES)**
- Starts: Stanton. Ends: Norwich City Centre.
 - A Thursday service only.
 - Towards Norwich in the Morning, and away from Norwich in the afternoon
 - Links Snetterton Heath to Attleborough – journey takes 5 minutes.
 - Attleborough to Norwich journey takes 25 minutes.
 - No weekend services
- 5.4.8.1 This route appears to be the only one that links Snetterton Heath to Attleborough. Therefore there could be potential for more frequent services, although see Snetterton Shuttle Bus proposal at section X.

5.4.9 490 (NATIONAL EXPRESS) AND 727/797 (NATIONAL EXPRESS)

	727/797	490
Start End	UEA Brighton	Victoria Coach Station Norwich City Centre.
Attleborough to Norwich	45-50 minutes.	
Wymondham to Attleborough	5-10 minutes	30 minutes
Other destinations	Stansted, Heathrow and Gatwick Airports.	Thetford (25 minutes), Hethersett and Victoria Coach Station.

- Passengers are able to use National Express services for local journeys without booking if they have the correct change.

5.4.9.1 It could be that it is not well known that residents can use these services for local journeys. The route between Attleborough and Wymondham and Thetford could be attractive when compared to the car for example. This could be advertised more.

5.4.10 THE FLEXI BUS

5.4.10.1 The Flexibus is a ring and ride service with no fixed timetable already operating in Norfolk. The bus is pre booked and passengers travel to where they want for the price of a normal bus fare. The service needs to be booked 7 days in advance of the day of travel. There are reduced fares for children under 16 and Norfolk concessionary passes are accepted. It runs in the school term between 9am and 2:30pm, Monday to Friday and during the school holidays, 8am to 4pm. The bus operates in the Attleborough area as follows:

Harling Area. (Booking Monday to Friday, 9am – 4.30pm). Travel between these villages to/from Attleborough, Diss and Thetford; Banham, Blo Norton, Bressingham, Brettenham, Bridgham, East Harling, Eccles, Fersfield, Garboldisham, Gasthorpe, Goose Green, Heywood, Kenninghall, New Buckenham, North Lopham, Old Buckenham, Quidenham, Riddlesworth, Rushford, Shadwell, Shelfhanger, South Lopham, Wilby and Winfarthing.

Wayland Area. (Booking Monday to Friday 9am – 4.30pm). Travel between these villages to/from Attleborough and Watton; Carbrooke, Caston, Great Ellingham, Griston, Little Ellingham, Merton, Ovington, Rockland All Saints, Rockland St Peter, Shropham, Snetterton, Stow Bedon and Thompson.



5.4.10.2 Consideration could be given to the service travelling between Wymondham and Attleborough. In order to benefit commuter journeys, it could start earlier and finish later. The notice period of 7 days could be reduced. The Flexibus could be promoted as part of the Smarter Choices scheme. Finally, consideration could be given to running the service on Saturdays.

5.5 TICKETING OPTIONS

- 5.5.1 The Government's vision is to deliver, along with transport operators and public sector bodies, the infrastructure to enable most public transport journeys to be undertaken using smart ticketing by December 2014.
- 5.5.2 There are a number of trials currently taking place to test technology including 'touch in, touch out' contactless payments, smart phone payments and ITSO smartcards¹⁸.
- 5.5.3 It is anticipated that such technology will be commonplace within Norfolk by December 2014 in line with the Government's objective. However in the meantime a number of ticketing options are available including weekly, monthly and annual passes on the buses serving the area.

Case Study Box x: First group – new ticketing technology

FirstGroup are currently investing £27m as part of their commitment to provide new ticketing technology to its 5,000 buses in England. They intend to be the first bus operator outside London to offer customers 'touch in touch out' contactless payment. New ticket machines, designed to read contactless debit or credit cards, in addition to Integrated Transport Smartcard Organisation (ITSO) smartcards such as concessionary bus passes have recently been introduced to First buses in Hampshire and Dorset and will initially allow customers with an ITSO smartcard to touch in. Contactless bank cards will be accepted from late 2012.

First's new ticketing system will act much like London's Oyster Card; customers will simply touch in and touch out using their debit or credit card, taking less than a second, and avoiding the need to carry the correct change. The system will also allow First to offer a range of tickets including capping the daily fare. But unlike Oyster customers will not need to carry an additional card or worry about pre-payment or topping up. Customers using the contactless cards will simply see the cost of the fare deducted from their bank or credit card balance.

With the continuing rapid advancement of mobile phone technology, First has also ensured that its new system has the capability to accept payment via mobile phone. The public transport industry will increasingly rely on new technology such as contactless bank cards and mobile phones to both retain and attract customers. It is anticipated that by simplifying bus travel and introducing a maximum capped daily fare by introducing such technology will encourage car users to make the modal shift to bus especially given the continuing high costs of fuel.

5.6 A NEW BUS INTERCHANGE?

- 5.6.1 Attleborough currently does not have a bus Interchange per se. The main bus stop where most buses that serve the town stop at is on Church Street.
- 5.6.2 The need for a bus interchange depends on the number of buses the area needs to accommodate. Indeed a bus interchange can come in many forms ranging from on road bus bays with shelters and information, to off road facilities with waiting rooms and cafes. The scale of the facility would depend on the number and timetabling of services.
- 5.6.3 The existing bus shelter does little to attract bus users, is unwelcoming and is poorly located in relation to the existing bus stop. Improvements should be made to introduce greater levels of transparency or the facility should be replaced with a bigger, brighter, more transparent facility with improved passenger information and real time information which meets the needs of all potential users (Gold Standard – see later table).
- 5.6.4 If a new bus/bus interchange is to be provided there may be capacity restrictions on how many buses can be dealt with (depending on the space available, number of stops, etc.)

¹⁸ ITSO is a government-backed non-profit distributing organisation (<http://www.itso.org.uk/>) which sets a common technical standard that:

- means transport operators throughout Britain could link up so passengers only have to use one secure payment 'smart' card no matter what bus, train or route they are using
- means that same card can be developed for multiple uses, including council services such as leisure centres or libraries

5.6.5 The impact of any proposed bus interchange and the physical changes required to support its operation would also need to be carefully designed so as to respect the more intimate and eclectic character of the conservation area.

5.6.6 There are a number of options for a bus interchange around the town centre area which are discussed at a high level in the following table. It should be noted that no technical assessment has been undertaken to date – the table gives a high level, desktop analysis.

Potential option	Initial discussion
The Main Town Centre car park	<ul style="list-style-type: none"> • In the town centre, near to destinations. • Would result in loss of car parking spaces. • Potential conflict with pedestrians leaving and accessing cars. • Conflict on Market Days. • Requires a diversion off the bus's route. • Likely to require a turning manoeuvre in the car park. • Could remove obstacles to the flow of traffic from Church Street.
Using the road that arcs around Queen's Square	<ul style="list-style-type: none"> • In the town centre, near to destinations. • Would result in the loss of on street car parking spaces. • Potential conflict with pedestrians accessing car park or services in this area. Also at the junctions with Church Street. • Diversion off the route is not significant. • Could aid traffic flow along Church Street. • Could remove obstacles to the flow of traffic from Church Street.
Connaught Plain – bus laybys.	<ul style="list-style-type: none"> • In the town centre, but not immediately near destinations. • A two lane road that could accommodate on street bays. • Potential ease in re-entering traffic. • Minimal, if any, conflict with pedestrians. • Could remove obstacles to the flow of traffic from Church Street. • Would still likely result in buses going along Church Street and stopping where they do now, although fewer in number.
Train Station	<ul style="list-style-type: none"> • Not in the town centre. • Would still likely result in buses going along Church Street and stopping where they do now. • Could remove obstacles to the flow of traffic from Church Street. • Obvious area is outside the Railway Station buildings which has limited land and would result in potentially complicated turning manoeuvres. • Would see the Railway Station served by many buses.
Church Street	<ul style="list-style-type: none"> • Could require extension to the bus laybys. Potentially reduce number of on street car parks. • In the town centre, near to destinations. • Already accepted as the location of the main bus stop in the town. • Could cause obstacles to flow of traffic. • Could conflict with pedestrians and cause an oppressive environment.

5.6.7 There are a range of potential options assessed in the previous table. Further work is required to reflect the changes to the existing services, new services as well as any changes to the town centre gyratory.

5.7 BUS / RAIL INTERCHANGE

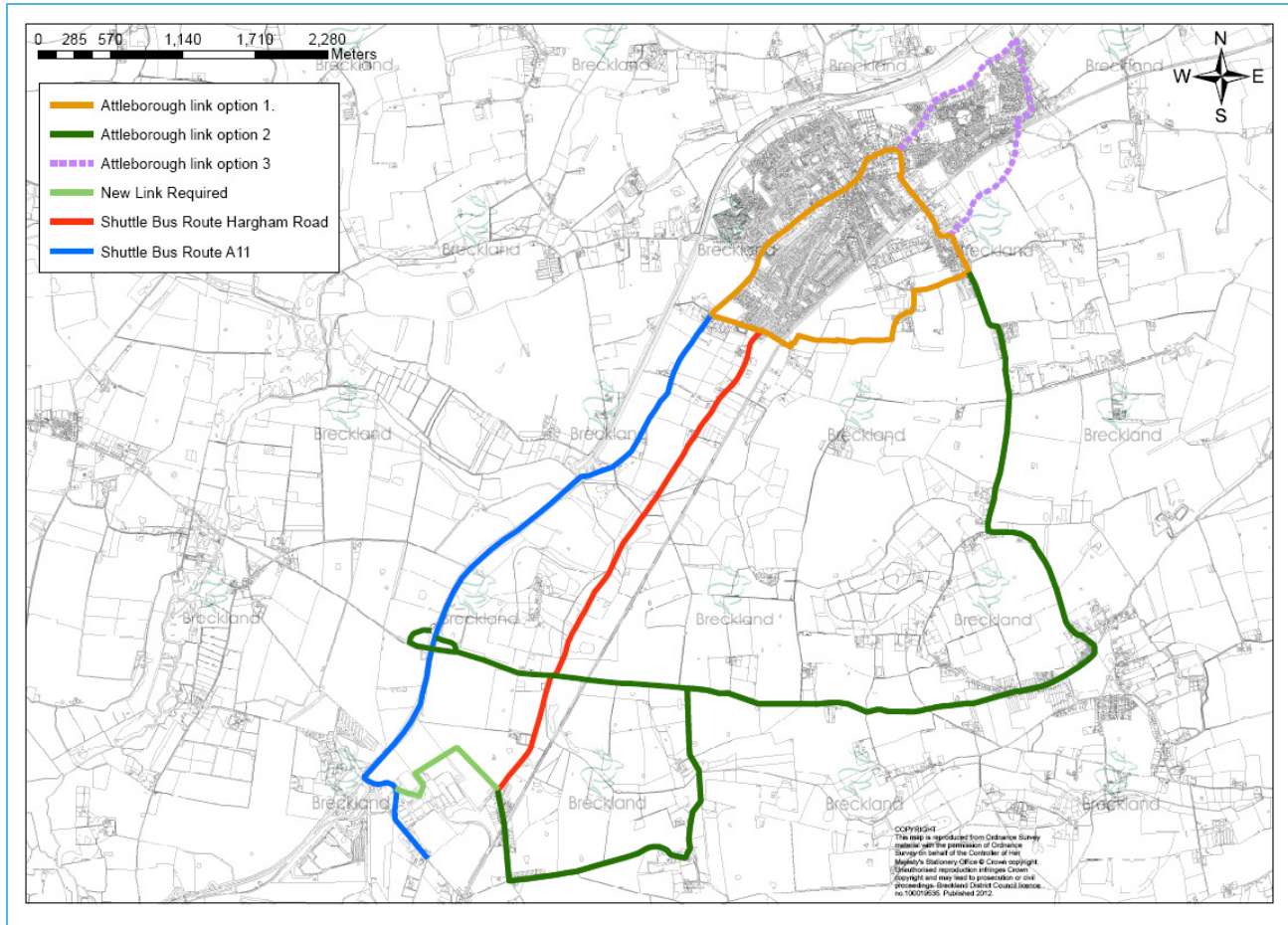
- 5.7.1 A new bus/rail interchange facility would greatly increase public transport integration in Attleborough as the distance between the rail station and the nearest operational bus stop is currently some 650m. There a number of possible locations for a bus/rail integration facility including the existing rail station car park. However, the provision of such a facility is likely to be difficult and expensive given requirements for land purchase and geometric requirements to facilitate turning buses, layover bays, etc.
- 5.7.2 A cost effective alternative would be to use bus stops located close to the rail station on Station Road. This would provide a similar link between bus and rail and could utilise the existing bus stop locations which are currently out of use. However, service routes would need to consider the lack of turning facilities currently, although with development in the future to the south of the railway, the route as shown at Figure x
- 5.7.3 The introduction of a bus/rail interchange (for services passing the station) are likely to see these stops becoming the timing points for services so that bus and rail services can be co-ordinated. The timings are likely to be determined by the operator but buses could be expected to arrive shortly before trains in the AM and shortly after in the PM.

5.8 SNETTERTON HEATH SHUTTLE/ORBIT BUS PROPOSAL

- 5.8.1 As identified in the previous exercise, currently there is limited bus provision to Snetterton Heath. With Attleborough set to grow and more employment offered at Snetterton Heath, in order to attain modal shift, improved bus provision between Attleborough and Snetterton Heath should be provided. This section seeks to identify a route for a Shuttle/Orbit Bus.
- 5.8.2 The proposed service could simply travel between Attleborough and Snetterton Heath. However, further options for consideration could expand the route to take in other destinations in the area which do not currently benefit from a bus service.
- 5.8.3 The proposal is to effectively provide a broadly circular route. Buses would travel in both directions around the route. Importantly, the options to provide an expanded service will not affect the length of journeys of an individual, but simply offer more people the opportunity to travel to the destinations along the route. For example, someone taking the shuttle bus to Snetterton Heath who boards in Attleborough town centre will not be inconvenienced by the service extending to Mill Lane as they can board the bus that travels in a anti-clockwise direction and as such their leg of the route is the same journey a car would make and is not lengthened.
- 5.8.4 The route options are as follows:
1. Blue route – this route uses the A11. It would travel along London Road accessing the A11 at Breckland Lodge roundabout. This would pass by new development on London Road, whether this is employment or housing.
 2. Red route – this would be an alternative to the A11. This would not pass any employment or residential development on London Road however. This route would require a new link (bright green) at the Eccles Road end of Hargham Road to enter Snetterton Heath Employment Area.
 3. Option 1 (the brown route): travels around two arms of the gyratory, along Station Road, past the GP Surgery, Railway Station and businesses nearby and continues west of the B1077. Whilst this is shown as using existing roads at the present time, if development is in this direction, it will follow the main route through the development, using appropriate roads. It will use the new bridge to cross the railway and pick up the red or blue route. The brown route passes the town centre, much housing to the west of the town, the railway station, the urban extension to the west of the B1077 as well as the Haverscroft Employment Area.
 4. Option 3 (the purple route): uses option 1 to link with the red and blue routes. It passes the High school and the houses along Norwich Road and any potential new development along this road. It travels down Mill Lane and along Silver Street, passing the houses on that route. This does not pass the GP surgery, railway station or the businesses along the B1077 however. Whilst this is shown as using existing roads at the present time, if development is in this direction, it will follow the main route through the development, using appropriate roads.

5. Option 2 (the green route): uses option 1 to link with the red and blue routes. It passes Bunn's Bank which could be a destination for the shuttle bus. It also travels to Old Buckenham. These two destinations are not currently linked to each other or Attleborough by bus. It also passes Eccles Road and could be a shuttle bus for those at this station. If a new link is not provided then the route can use Hargham Road and access the A11 southbound, although this will not pass Eccles Road. Whilst it might be desirable to link Attleborough and Snetterton Heath to Old Buckenham, there could not be the demand which could affect viability. The route could be subsidised, but this would likely be in perpetuity. As such, it is not recommended as part of this report, but could be considered if required.

Figure 10 The Snetterton Heath Shuttle/Orbital Bus.



- 5.8.5 It is suggested that the shuttle bus itself could be a minibus with standing room and space for a wheelchair. It could operate similar to the Turkish Dolmus (Dolmush) whereby it operates along a set route, fairly frequently (perhaps four times an hour), costs a set amount (which reduces time when buying a ticket) and can be flagged down anywhere in urban areas as well as drop off anywhere in urban areas, as long as it is safe to do so. In rural areas, there will be set places for pick up and drop off. The ultimate aim for public transport is to offer convenience similar to the car. These proposals could provide this convenience.
- 5.8.6 If the local authority was to pay for the service (and fund the vehicles) they could specify how the service was run. There are many local bus services which operate on a flag down basis which also allow passengers to request stop (where safe and convenient to do so).

Case Study Box x: Pembrokeshire Greenways¹⁹

The coastal bus services run up and down the National Park coastline, ensuring that the entire length of the 186 mile (299km) Pembrokeshire Coast Path National Trail, from St Dogmaels to Amroth, is accessible by public transport. The buses which run 7 days a week from May to September are user friendly; walkers can flag the buses down along the coast road and allow passengers to take dogs and buggies on board.

- 5.8.7 In order to enhance attractiveness and help deliver sustainable movement to Snetterton Heath, it is recommended that a service frequency of four buses per hour operates between Snetterton Heath and Attleborough. Based on indicative journey times there are a number of options for providing this level of service based on the routes identified above.
- 5.8.7.1 **Option 1 – Attleborough – Snetterton Heath Shuttle.** This would use the brown and blue routes to provide a shuttle service between Attleborough and Snetterton Heath serving the urban extension. It is possible that the service could use existing bus stops where they exist with new facilities being provided within the urban extension and Snetterton Heath funded by developers. Alternatively services could operate on a hail and ride basis with occasional facilities provided with enhanced access kerbs for those with reduced mobility. Indicative journey times suggest it would take 30 minutes to complete a return journey. On this basis two buses would be required to operate the service with broad cost estimates of service operating costs being £110k²⁰ per annum.
- 5.8.7.2 **Option 2 – Extension to existing Norwich – Attleborough service (plus single shuttle bus).** Extending the existing Norwich to Attleborough services (number 13) to Snetterton Heath would increase total journey times and as such operators are likely to require additional units to maintain service frequency. Assuming that only one of the existing Norwich – Attleborough operators would be prepared to extend their service to Snetterton Heath at least one shuttle bus service (as described in Option 1) would be required in order to achieve the desired level of service frequency. Assuming an additional bus is required for the extended service and one bus for the shuttle service indicative operating costs are also £110k per annum.
- 5.8.7.3 **Option 3 – Attleborough – Old Buckenham – Snetterton Heath.** Extending the Attleborough – Snetterton Heath Shuttle to call at Old Buckenham using the dark green route could possibly be achieved at a frequency of every other service without compromising the total service frequency of four per hour. Assuming Option 1 as a base with every other service via Old Buckenham and no requirements for further vehicles to maintain service frequency indicates operating cost of £130k. Further alternative proposals including providing alternate services via the purple route could also be considered although it is likely that these could be accommodated within the Options above without significant variation of operating requirements or costs.
- 5.8.8 In order to enhance attractiveness and help deliver sustainable movement to Snetterton Heath, the recommended the service could be provided as follows:
- The bus operates 4 times an hour in the peak time.
 - Less frequently out of peak, be it every half hour or hourly.
 - The A11 is used (blue route).
 - The brown route is used every half hour
 - The purple extension to the route is used every ‘other’ half hour

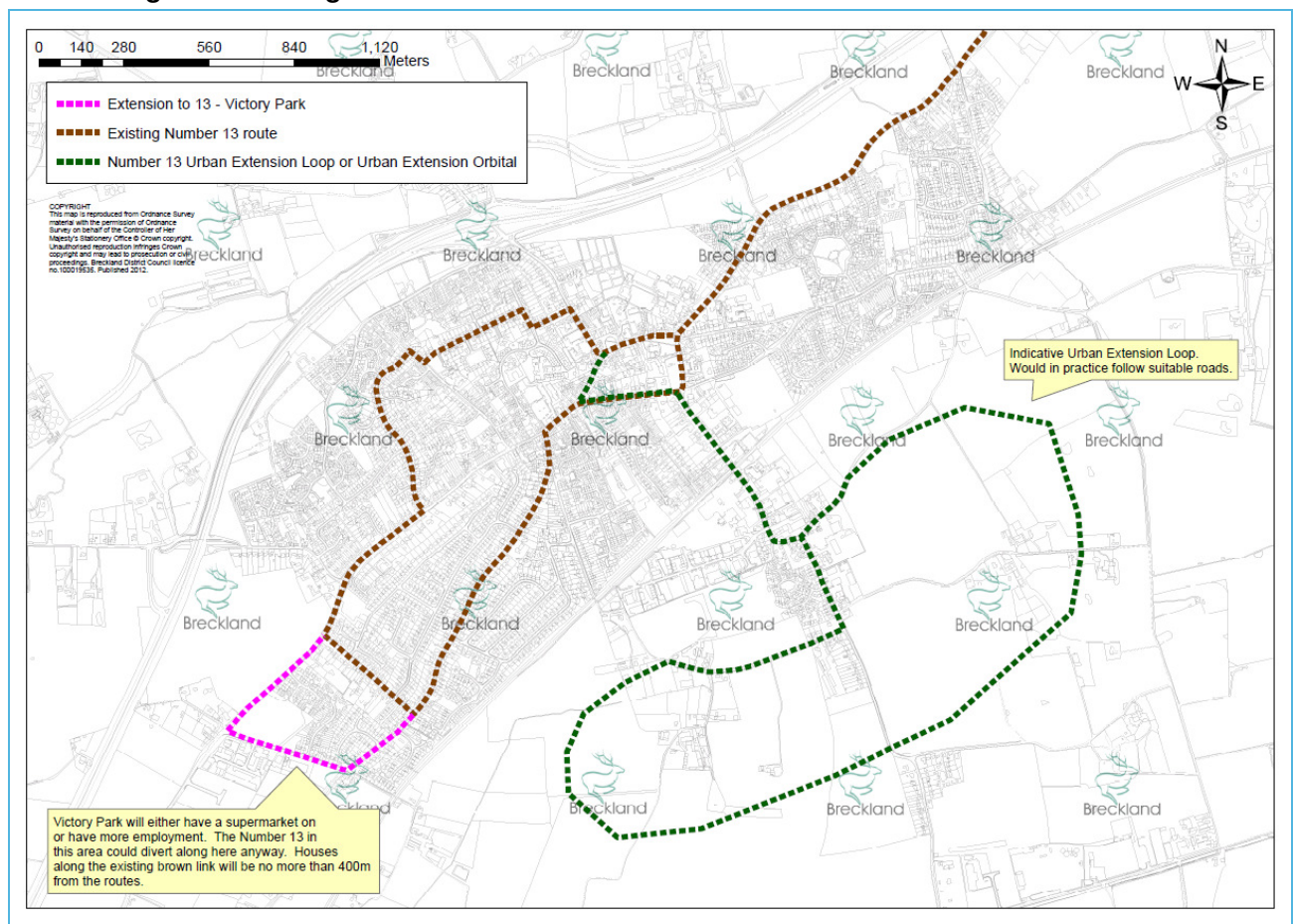
¹⁹ <http://www.pembrokeshiregreenways.co.uk/>

²⁰ Indicative Operating costs at 0.70p per mile to cover costs of fuel and staff costs (drivers wages) and vehicle depreciation at £3,000 per annum.

5.9 SERVING THE NEW DEVELOPMENT

- 5.9.1 It appears that an obvious way of serving development to the south of the town is by utilising the number 13 bus that travels between Attleborough and Norwich. Figure x shows how this could work.
- 5.9.2 As shown on the map, an extension to Victory Park (the pink route) could be logical anyway in light of future development in that area.
- 5.9.3 To serve the development to the south of the railway and maintain service to the existing town, there could be potential for four services an hour. Two services on the opposite half hour would use the green route and the other two use the brown route. Services would travel in both directions along the route.
- 5.9.4 At section x it is also suggested that there are other improvements to the 13 service.
- 5.9.5 There are some other issues for consideration. Firstly, could the service link in Bunn's Bank which currently does not have any bus service and which could see employment activity intensified. Secondly, is there potential for Besthorpe to be served by the 13?
- 5.9.6 As mentioned at section X, there could be potential to extend the 13 to Snetterton Heath. If not, there could be potential for a new Shuttle or Orbital bus. The aim of serving Snetterton Heath and the Urban Extension needs to result in a logical, efficient service that is value for money to run and to use.
- 5.9.7 An alternative to extending the number 13 along the green route is to provide an Urban Extension orbital. This could see the orbital route travelling between the town centre and Urban Extension regularly. In order for residents for the urban extension to travel to Norwich, they would be required to get on the number 13 in the town centre.

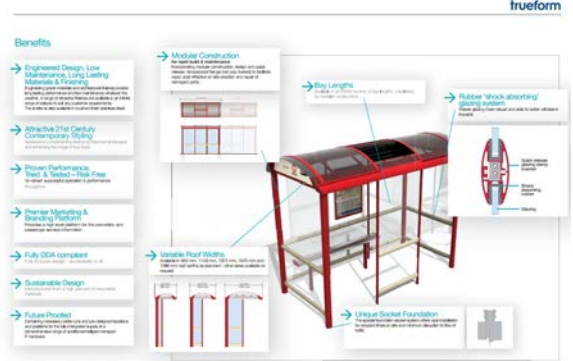
Figure 11 Linking in the Urban Extension to the south of the town.





5.10 STANDARDS FOR BUS STOPS

- 5.10.1 Existing bus stops should be audited to ensure provision is adequate and in accordance with appropriate standards. There are currently a number of good guidance documents on bus stop design including Transport for London's, 'Accessible bus stop design guidance' which build on advice given in Local Transport Note 1/97 Keeping Buses Moving. The audit could cost £350-400 a day although number of stops per day would depend on Geographical spread and amount of work required at each.
- 5.10.2 Where stops are satisfactory and no existing issues are identified then these should be retained. Consideration could however be given to infrastructure, kerbing, surfacing and road markings renewal as required. It is however recommended that the provision of a consistent standard (and/or theme) of bus stop be required as part of a strategy to promote bus use. As such the standard detail of an approved bus stop standard would need to be retrofitted in certain circumstances. This would need to be determined on a site by site basis.
- 5.10.3 If problems are identified during the audit of existing stops, are highlighted by the bus operator, or stops need to be relocated/upgraded/added/removed then bus stop designs should be drawn up applying the appropriate guidelines.
- 5.10.4 It is recommended that existing and proposed bus stops should be rated according to Gold, Silver or Bronze standards depending on the level of usage and designed according to the relevant rating. The appropriate minimum provision for each standard is defined in the following table with provision of access kerbs considered essential across all ratings. Examples of standard details for bus stops of each rating are provided as Appendix X.
- 5.10.5 The provision of new bus stops for the urban extension and new employment areas should consider the routes and frequency of any new services and should aim to penetrate areas so that the majority of the built up area continues to be within 400m of a bus stop. Where possible bus stops should be located a maximum of 200m apart although this is likely to be influenced by consideration of passenger convenience, safety, and the needs of other road users.
- 5.10.6 Where new bus stops are identified as being required the standards from **Error! Reference source not found.** above should also be applied based on predicted levels of usage. This should also ensure that the needs of disabled passengers and wheel chair users are considered in the design of facilities. There are bus stop suppliers who will erect and maintain bus stops/shelters where they are able to provide advertising space. This option could also be considered to minimise costs.
- 5.10.7 The appropriate design of each bus stop including bus stop platforms (i.e. use of build outs/bus boarders should be considered on a site by site basis.

**Specification for Bus Stops According to Gold, Silver and Bronze Ratings
(images courtesy of Trueform)**

<p>GOLD RATED STOP (Medium to high use)</p> 	<ul style="list-style-type: none"> - Shelter mandatory. An enclosed shelter using shatterproof materials is preferred but this depends on site restrictions. - A 3 bay shelter should be provided where enclosed not possible. - Real time information to be installed at these locations. Attempt to accommodate real time display into the shelter construction. - Provision of timetable information in either 'text a code' or display form. - Bin to be provided at all gold stops
<p>Gold rated stops at interchanges (Minimum Standard)</p>	<p>As above plus:</p> <ul style="list-style-type: none"> - Directional signs and information displays. - Stop numbering.

<p>SILVER RATED STOPS (Low to medium use)</p> 	<ul style="list-style-type: none"> - Secure cycle storage - Shelter to be provided at all stops where space permits. The size of the shelter and whether it is enclosed or cantilever depends on site restrictions. - Rubbish bin - Real time information integral to the bus stop. - Provision of timetable information in either 'text a code' or display form.
<p>BRONZE RATED STOPS (Low use)</p> 	<ul style="list-style-type: none"> - No shelter to be installed - Rubbish bin - Real time information integral to the bus stop. - Provision of timetable information in either 'text a code' or display form.

5.11 CYCLE CARRIAGE ON BUSES AND COACHES

- 5.11.1 Facilities for cycle carriage on bus and coach services are important for both leisure and everyday transport journeys. Some 45 companies in Britain currently carry cycles on their services and this number is increasing. Overseas experience suggests that there is potential for many more bus companies in the UK to carry cycles. 25% of the USA bus fleet carries cycles on front-mounted bike racks.
- 5.11.2 There are few, if any, technical or legal barriers to carrying cycles by bus and coach with a number of possible ways that cycles can be carried on buses:
- Inside the bus itself either in a separate compartment or in areas of 'shared' space
 - In the under-floor locker of a coach
 - In the boot of a coach
 - On the exterior of a bus on a rear-mounted cycle rack
 - In a trailer fitted with cycle racks and towed behind a bus or coach.
- 5.11.3 In addition, folding bikes enclosed in a bag can often be carried as hand luggage - at the discretion of the driver.
- 5.11.4 As current levels of bus use amongst cyclists is low, cycle carriage can bring new revenue to bus and coach operators. For cyclists to contribute to the viability of services, operators need to advertise that they welcome passengers with cycles, and should clearly indicate this in their Conditions of Carriage.
- 5.11.5 In addition to the availability of 'through' ticketing for passengers and cycles between different operators and between bus and train, cycle carriage facilities can also contribute to sustainable countryside access and social inclusion objectives.

Case Study Box x: First Group, Scotland – bikes on buses

One such example includes a pioneering trial in Scotland from transport operator First Group. Cyclists will be able to board First Group bus services with their bikes in Glasgow, Aberdeen and services that connect eastern Scotland.

Bikes will be parked in the space occupied by baby buggies or wheelchairs if the space is not occupied by those items and only after 7pm when passenger traffic on the buses are less busy. Only one bike will be carried per bus. First Group's move follows a campaign in the Scottish Parliament to get Scottish bus companies to carry bikes on their vehicles, whether inside or strapped to buses.

Whilst this example may not necessarily assist commuters in the peak hour, it shows a starting point on which to build this offer.

5.12 GETTING MORE PEOPLE USING THE BUS

5.12.1 The following factors could deter more people from using the bus:

Potential deterrents	How this report seeks to address this.
The need to get to bus stops to get the bus	At section X we refer to the potential for 'hail and ride'.
Buses not going directly to where users want to go. Perhaps a change of bus is needed, or the destination cannot be reached conveniently by bus or at the time required.	The potential amendments to the existing services as well as aiming to link in the Railway Station, Urban Extension and Snetterton Heath could address this for residents in the area.
Need to get off at a bus stop at a certain point, which could be beyond or short of where it would be more convenient to alight.	The 'hail and ride' and Dolmus idea would allow people to get off at a safe place.
The cost can be seem as some as too expensive for what using the bus offers.	There are existing ticket offers. There could be a flat fare for services in the town as discussed in the Dolmus section.
To some people, only the young, elderly or not well off are the only people to use the bus.	Improving the perception of buses/bus use can be achieved through the provision of high quality vehicles, improved services and facilities (see also bus stops above). This could also include the introduction of modern technology such as real time passenger information, off bus ticketing or smart cards, bus priority measures on bus routes and on board/at stop cctv. Marketing and publicity campaigns can be jointly delivered by LA's and PT operators and can include leafleting, up to date websites, discounting initiatives, self promotion (i.e. livery on buses) and other forms of advertising.
There is sometimes not a bus when you want one, which leads to waiting around, which is not pleasant if the weather is poor.	The provision of real time would inform commuters who could perhaps return to their home or get a coffee and return to the stop when the bus arrives. The provision of shelters and seats as discussed at section x could help this.
The routes can be circuitous and this can add to journey time.	This is an issues that needs to be considered as new routes are planned in detail. The route ideally should be as close to the time taken to drive a car. As shows at section X, some of the existing services to/from Norwich take a similar time to the car. The orbital routes as discussed would see buses travelling in both

	directions.
Buses not arriving on time.	Buses running late is not as common as perhaps people think. The provision of real time could mean that people are aware that a bus is late and plan their trip accordingly. This is a catch 22 situation – more traffic, buses caught up, not seen as attractive, more people drive. However, if more people took the bus, there could be less traffic which could see buses more prompt.
Integration with other modes of transport.	There could be potential for cycles on buses. owing to the favourable topography consideration should be given to promoting the provision of cycle carriage on buses and coaches. Some 45 companies in Britain currently carry cycles on their services and this number is increasing. Services can connect with other public transport services (including rail) or they can run in competition with rail services. Bus stops near to the railway station with logical timetabling of services.
People are unsure of bus timetables or the benefits of using the bus.	Travel plans, particularly those delivered with new businesses as part of the planning process can also be used to encourage employers/employees to promote and encourage bus use. Approaching existing large businesses (Banham Poultry, Hamilton Acorn, etc.) to develop Travel Plans should also be considered and is considered further elsewhere in this report (ref).

5.13 CONCLUSION

5.13.1 With Norwich being a large attraction for various journeys from Attleborough, the bus offers the potential to travel to other parts of the City that are served by the train, namely the hospital and City Centre.

5.13.2 Amendments to the existing services as well as potential new services to consider are discussed. It is recommended that whatever changes to the services serving the town ensue, the following principles are considered:

- A coordinated approach is adopted
- The existing communities served by buses benefit from changes
- Services offer value for money to commuters
- New services or amendments are viable and offer value for money to operators.
- The bus is the obvious choice offering journey times and convenience as near to the car as possible

Key recommendations for Buses:

- Bus use be promoted in the area
- Gold, silver and bronze stop ratings
- Discussions with bus operators in the area are undertaken early on in the planning process for the growth of the area.
- The potential amendments to the existing services as raised at section x could be raised with the operators.
- The need and detail of an improved bus interchange facility be investigated through a feasibility study.

- Snetterton Heath and the Urban Extension be linked to Attleborough, and potentially each other, through either shuttle or orbital buses or extensions to the number 13 route, or a combination of both.

6. Public Transport - Rail

6.1 INTRODUCTION

6.1.1 Train use for travel to work in the area is well below national and regional standard. This section suggests ways to improve access to Eccles Road and Attleborough Stations, the potential for using Eccles Road Station more, Freight and Transshipment as well as ways to get more people using the train more often.

6.2 POTENTIAL BARRIERS TO USE - ECCLES ROAD

6.2.1 Inter-platform Access. Inter-platform access at Eccles Road Station is via the road level crossing. When the level crossing is closed to traffic it does prevent access to the platforms from one approach direction by pedestrians. Regular or local users will however be aware of this and are likely to build in additional time to ensure they can reach the desired platform before the crossing barriers are closed. The cost of providing a pedestrian footbridge to remove this issue will be prohibitive at this location as costs are likely to be in excess of £1 million. There is currently no footway between the two platforms therefore consideration should be given to demarcating a pedestrian area to link with other footways in the area, this is a low cost option, anticipated to be in the region of £5k (subject to land availability/ownership to achieve suitable gradients).

6.2.2 Platform Accessibility. Platform 1 (to Norwich) has step free access; however, it uses the platform end ramp which has a gradient greater than 1:20. Platform 2 (trains to Cambridge) does not have step free access. There are three steps to negotiate to access the platform. Providing step free access to both platforms will increase accessibility making it easier for those with mobility impairments, pushchairs, luggage or bicycles to access the station. The cost to provide a ramp for the Cambridge platform is likely to be around £10k (subject to land availability/ownership to achieve suitable gradients and excluding design and supervision costs). The level crossing at Eccles Road Station is currently being upgraded to an automated barrier crossing as part of the re-signalling of the line. It appears that the entrance to the Norwich platform has been altered to facilitate the barrier works and the route is not currently surfaced. It is likely that this is temporary situation and a tarmac surface will be added, however, the platform end ramp is still used. There is potential to provide a ramp with a more suitable gradient to the rear of the current platform subject to land ownership/ availability. The cost associated with this is likely to be in the region of £15k (excluding design and supervision costs) due the increased height difference and longer ramps required.

Figure 12 Access to Cambridge (left) and Norwich (right) Platforms.



- 6.2.3 **Platform Shelters.** The platforms are narrow and only small shelters are provided. If demand at the station increases then larger shelters will be required. The platforms, however, are not wide enough to accommodate a standard shelter. A cantilever shelter would be required on the Norwich platform and either a standard shelter, if it can be accommodated near the entrance, or a cantilever shelter on the Cambridge platform. A new shelter would cost £25-30k.

Figure 13 Lack of provision for pedestrians over the level crossing (left) and existing platform shelter (right).



- 6.2.4 **Cycle Storage.** There is no cycle storage at the station. Sheffield stands could be provided on both platforms, ideally covered; however this may be difficult to accommodate due to limited space. The land requirements for the new level crossing may be slightly different from the existing therefore the potential land for cycle storage facilities should be reviewed when the level crossing replacement has been completed. A suitable area for cycle storage should be identified, even if this is on one side only. The cost of a cycle canopy with Sheffield stands is in the order of £6k.
- 6.2.5 **Train Frequency & impact of increased services.** Eccles Road Station is currently served by two trains to Norwich in the AM peak (departing from Eccles Road at 0658 & 0800) and two trains from Norwich in the PM peak (1552 & 1735 departures from Norwich). There are currently no stopping trains heading towards Cambridge in the morning or to Norwich in the afternoon which would benefit Attleborough residents who work at Eccles Road, and no stopping trains in either direction during the off-peak period. There is no Sunday service to Eccles Road. The services are therefore likely to be of limited use to most passengers and do not offer much flexibility if the intended train is missed. The catchment area for Eccles Road is relatively local and there is currently limited residential development within the area and no parking. The proposed 20ha of additional employment has the potential to generate additional demand but will require a more regular service to fulfil its potential. Although there is likely to be some uplift in passenger demand if services were increased the low base figure means that this alone is unlikely to be sufficient to justify increased stopping frequencies.

6.3 POTENTIAL BARRIERS TO USE – ATTLEBOROUGH RAILWAY STATION

- 6.3.1 **Inter-platform Access and Platform Configuration.** Inter-platform access at Attleborough is via the road level crossing, although there is a separate pedestrian gate at the crossing. The gates are currently manually operated by the signaller although the level crossing is currently being upgraded to an automatic crossing as part of the re-signalling of this section of line.

- 6.3.2 Attleborough Station currently has a staggered platform arrangement separated by the level crossing. This arrangement results in some severance and slightly reduced natural surveillance of the platforms. The level crossing is closed before a train arrives which means that anyone arriving after this time from Attleborough town centre to catch a train to Cambridge cannot reach the platform, equally anyone arriving from the south of Attleborough cannot access the Norwich platform after the crossing barriers are closed. There is currently a separate pedestrian gate which does not lock when a train is approaching. Whilst some passengers may choose to cross if they cannot see a train, site observations suggest that the majority of people see the vehicle barriers being closed as an indicator not to use the pedestrian route. It is unlikely that this will be retained once the automatic crossing is completed and this will impact on the degree of severance. Providing platforms which are opposite each other will improve the natural surveillance of the station, however, the inter-platform access will still be via the level crossing and the severance this causes will persist.
- 6.3.3 Parallel platforms may also impact on the way the level crossing operates: at present the crossing barriers are reopened whilst trains are still in the station as the platform is after the level crossing in both directions. If the platforms were parallel then the platform would be before the level crossing for trains in one direction which would potentially result in the level crossing barriers needing to remain closed whilst the train is in the station, increasing the length of time the level crossing is closed to vehicular traffic and impacting on queues and delays. The potential for relocating the platforms is also limited by lack of available space for example there are a number of buildings which are close to the line, including a number of listed station buildings. The cost of relocation the platform is likely to be more than £0.5 million (excluding any changes required to the level crossing operation).
- 6.3.4 The severance in pedestrian access to the station could be eliminated by the provision of a footbridge, however this would require ramped and stepped access and demand a significant amount of space, which is unlikely to be readily available at a suitable location. The cost of a bridge is also likely to be in excess of £1 million.

Figure 14 Cambridge Platform (left) and the existing pedestrian route over the level crossing (right).



- 6.3.5 **Platform Accessibility.** Access to both platforms is currently via the platform end ramps, which have a gradient greater than 1:20, although Network Rail are altering the access route to the Norwich platform as part of the level crossing upgrade which will provide improved access via a set of steps and ramps. The Cambridge platform would benefit from improvements to the footway as at the point of entry to the platform it is narrow and has limited visibility of traffic. This should be reviewed once the work to upgrade the level crossing and associated access amendments are complete and suitable improvement options can be developed. Cost of providing additional footway will vary depending on the extent of the work but could be between £5k and £10k.

Figure 15 Entrance to Norwich Platform (left) and the footway entrance to Cambridge Platform (right).



- 6.3.6 **Platform Shelters.** The Cambridge platform currently has a brick built shelter with canopy over the platform and additional seating on the platform. This is considered adequate for expected use and in keeping with the other station buildings. Whilst this is a useful provision to shelter commuters from the elements, it seems poorly maintained. It is therefore recommended that general maintenance is carried out for example through painting relevant surfaces inside and outside. Better benches could also be provided. It is also recommended that the interior be improved by the provision of plants and flowers, similar to the Norwich bound platform.
- 6.3.7 Furthermore, a competition could be run with local schools for the pupils to produce a quality mural for the shelter. The Norwich platform, which has the majority of the outbound traffic, does not have sufficient width for a shelter but does have a canopy over a section of the platform and additional seating. There are sections of the platform near the entrance which are narrow and where passengers may feel uncomfortably close to passing non-stop trains and do not have sufficient space to wait for trains. It is anticipated that the new access to this platform will direct passengers onto the platform avoiding the worst of these areas.

- 6.3.8 The station building is not currently in use, ideally it would be brought back into use to incorporate a covered passenger waiting room and this should be investigated as development proposals are developed. There would be sufficient space to accommodate a commercial use such as small retail store or café, but the use would have to be complementary to the station and not generate significant parking demands. However a use such as a café would provide additional staff presence at the station and provide surveillance of any waiting area.
- 6.3.9 The station buildings and area of parking adjacent are owned by Network Rail. The scale of the refurbishment of the buildings is not currently known – no internal inspection has been carried out so it is not clear what the layout and condition of the building is. The cost could be £50-£100k for basic work (assuming no significant structural alterations).
- 6.3.10 A more comprehensive refurbishment to meet modern thermal standards with internal remodelling if required to suit combined retail/public use (e.g. cafe/waiting room) would be nearer £250k depending on alterations required and specification of finishes.²¹
- 6.3.11 The implementation of a waiting room combined with a retail facility is likely to be more financially sustainable than a waiting room on its own right and the retail facility owner can be made responsible for its opening/closing and helps reduce risk of vandalism etc.

Figure 16 Shelter on Cambridge bound platform (left) and the canopy on the Norwich bound platform (right).



²¹ To firm this cost up would require more detailed study to agree layout and end user requirements.

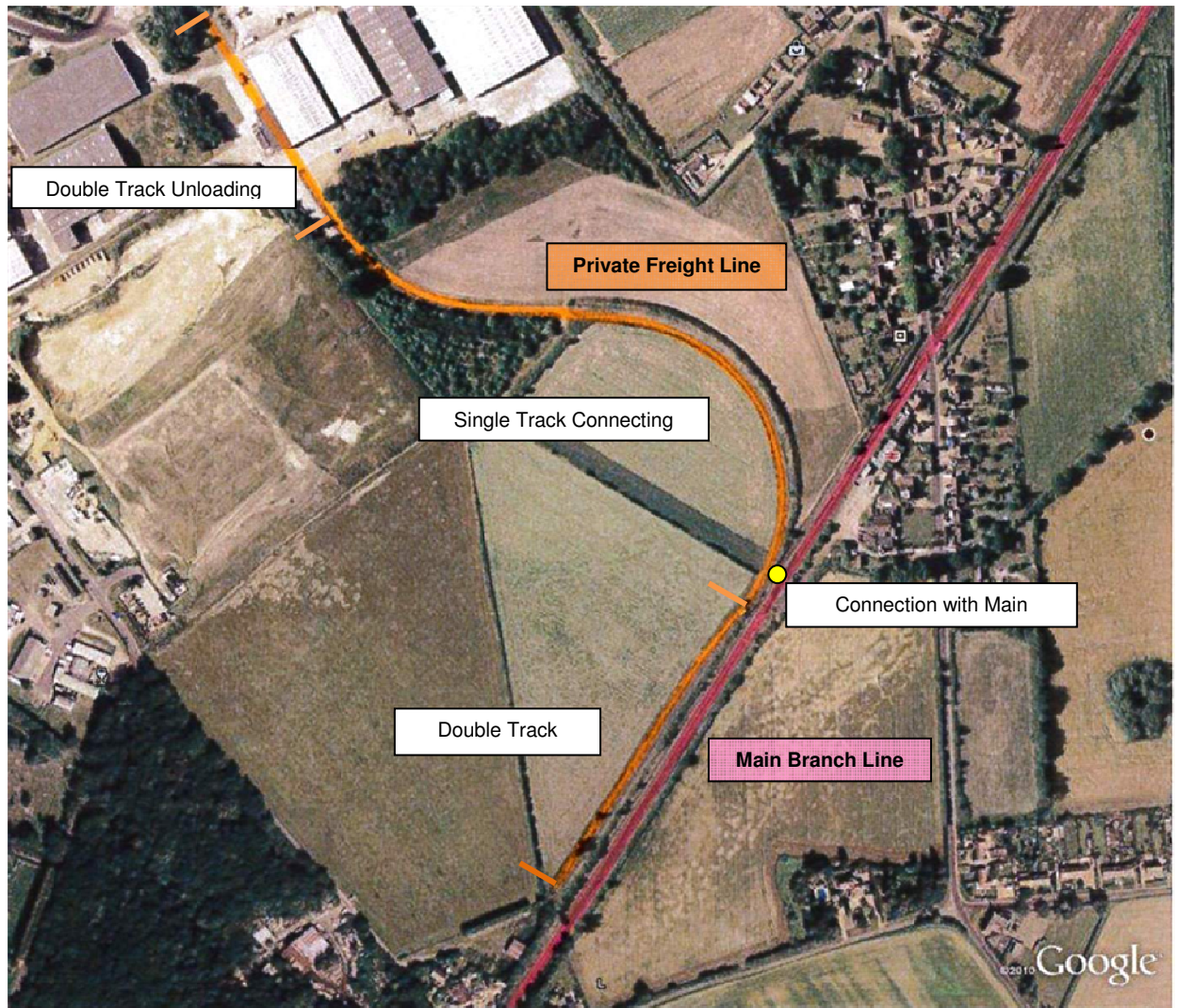
- 6.3.12 **Other Station Facilities.** The Norfolk Rail Prospectus (October 2012) identifies gaps in provision of other facilities at the station such as real time passenger information and toilets. These should be provided where possible.
- 6.3.13 **Cycle Storage.** There is currently cycle storage in the vicinity of both platforms. The Cambridge Platform has Sheffield stands with a shelter on the platform which provides a good level of visible cycle parking. The Norwich platform has cycle parking but it is not readily evident and does not have good natural surveillance.
- 6.3.14 Cycle parking on the Norwich Platform could benefit from being in a more open area with a shelter. The platform might not be deemed wide enough to accommodate similar provision to the opposite platform however. But to improve provision, as a minimum, a canopy should be added to the existing stands and signage should be provided to alert passengers to their location. Ideally if the car park and entrance area are being reconfigured a more visible location should be sought for the cycle stands. A canopy for the existing stands would cost around £5k. The cycle lockers on the Norwich Platform should remain, but usage monitored in order to ensure they are often available for all users.
- 6.3.15 On the Cambridge bound platform, a further 6 Sheffield Stands should be provided under shelter in an appropriate location on the platform. Such expanded provision could be in the medium turn to reflect any increased use of rail.

Figure 17 Cycle parking on the Cambridge bound platform (left) and on the Norwich bound platform (right).



- 6.3.16 Train Frequency & Impact of Increased Services. Attleborough is served by an hourly Greater Anglia train service between Cambridge and Norwich, i.e. one train an hour in each direction. In addition there are two East Midlands Trains services from Ely to Norwich which stop in AM peak and two from Norwich to Ely which stop in the PM peak. Initial high level calculations (using simplified Passenger Demand Forecasting Handbook methodology) suggest that if the Norwich to Cambridge frequency were increased from hourly to half hourly that the demand for this service could increase by up to 29%. Based on 2011-12 passenger figures this would equate to 46,500 one-way trips. Stopping all East Midlands Trains services at Attleborough would provide two trains an hour, however these would not be evenly spaced and would therefore not necessarily achieve the same level of demand uplift as a half hourly service. There would also be an increase in journey time for existing passengers as a result of an additional stop; this is typically around two minutes. Rail demand forecasting methodology suggests that for a 40 minute journey this would result in a loss of approximately 7% of passengers. Additional residential accommodation and associated population increase will also generate additional passengers at Attleborough. Using census data and the NRTS data to estimate trip rates for the current service level the additional rail patronage associated with the 4000 new homes could be expected to generate somewhere in the region of 56,000 (+35% of current demand) one-way trips. These demand forecasts are high level and based on significant assumptions: further work will be required to refine these as the location, composition and timescales of the development and potential transport improvement packages are refined.
- 6.3.17 Car Parking. There is currently parking adjacent to the station building (Norwich platform) which is well used, albeit in a haphazard manner, with no markings or signing. This does not appear to provide sufficient capacity to accommodate existing demand and there will therefore be a shortfall in future. Modal shift towards more sustainable transport may reduce the proportion of those arriving by car but as demand will increase with the new development the absolute number of parking spaces required will increase. Lack of parking causes suppressed rail demand therefore some additional parking will be required. Potential solutions for car parking are discussed at section [x](#).
- 6.4 FREIGHT
- 6.4.1 Network Rail's Freight Route Utilisation Strategy (RUS) produced in 2007 identified the section of line from the Great Eastern Main Line to Norwich (via Attleborough) as having 0 - 4.9 freight trains per day carrying 0 - 0.9 million tonnes (2004/5 base). The section is classified as W8 gauge which means it can accommodate freight vehicles with 8'6" containers; the line speed is identified as between 40 and 75 mph. The RUS forecasts an additional 0-4.9 extra trains per day by 2014/5 and does not identify any significant gaps around Norwich in terms of freight capacity.
- 6.4.2 There are currently several freight paths identified within the Working Timetable for the section of line which passes through Eccles Road and Attleborough Stations: three paths exist northbound Monday – Friday with one on a Saturday; four paths are available southbound Monday – Friday and one on Saturday. Generally there are not this number of freight trains using the route; to allow operational flexibility it is usual for more paths to be booked than are actually used.
- 6.4.3 There is an existing freight facility at the Johnston Logistics UK site near Eccles Road Railway Station illustrated below. A site meeting was held with the owner and management representatives of this facility to understand the current use and potential for this facility.
- 6.4.4 The 1000ft siding at the site was installed in 1985 and can accommodate freight trains up to 20 wagons in length; the siding is double track and can therefore hold two trains at a time (a total of 40 wagons). There are crossovers within the siding and Eccles Road Station which are used to manoeuvre into and out of the site. A curved section of single track, with radius of approximately 130m, links the siding with a transfer station within the main logistics site. In the past the rail freight facility has been used for seed potatoes, grain and road chippings. The last freight use of the site was around three years ago although the track access rights have been maintained through payment of an annual charge to Network Rail. The rail freight facility has received enquiries related to the transport of timber, quarried materials, and pipe line although there are no current commitments.

Figure 18 The Railhead at Snetterton Heath.



Source: Google Earth Pro

- 6.4.5 The viability of rail freight is likely to be dependant on the volume of goods and the distance they need to be transported. Rail will only offer a cost effective solution for bulky goods over longer distances (the view at the meeting was that this would be a minimum of 150-200 miles). Over short distances the competition from road haulage is strong and the time and effort involved in transferring goods to rail is disproportionate to the total journey time. Rail also becomes a more feasible option where there is a rail freight facility at both ends of the journey and where trailer containers can be transferred directly onto the rail wagons. The Eccles Road site has good onward road links to the A11 and has a potentially large onward catchment accessible by road.

Figure 19 Private freight line (to the left in the photo) and main branch line (far right in the photo) (left) and connection with branch line at Eccles Road Station (right).



- 6.4.6 The current infrastructure provision at the freight facility is likely to be sufficient to accommodate most freight traffic which can currently use this section of line (W8 gauge) and there are no current plans to upgrade the route for other classifications. Should the gauge be increased in future there are no structures along the section of private track which would potentially prevent access, subject to the track being of a suitable standard. The existing transfer shed may need to be increased in height, but the cost is likely to be modest compared to other infrastructure works. There is a commitment to increase the freight gauge on the Great Eastern Mainline to W10 (capable of carrying 9'6" wagons), however, given the current low base for freight traffic it would be difficult to justify investment to upgrade the freight gauge of the section from the mainline to Norwich via Eccles Road.

Figure 20 Freight train within facility (left) and warehouse indicating existing clearance (right). Images courtesy of Johnston Logistics UK

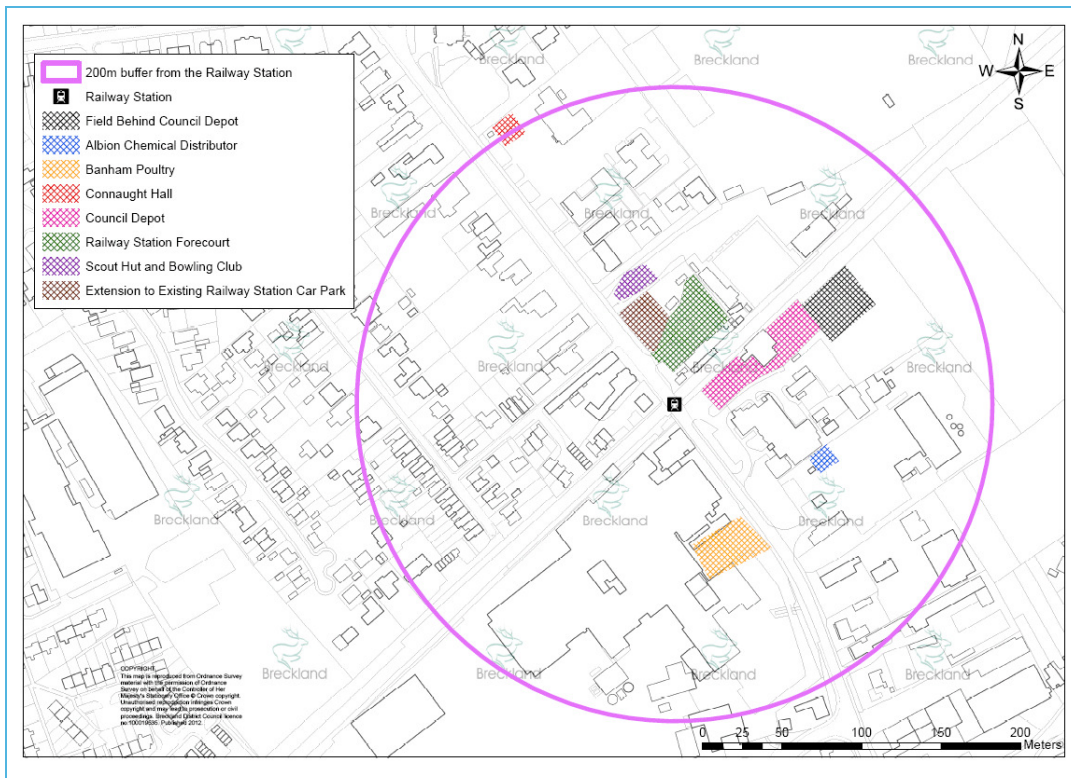


- 6.4.7 There is an ongoing cost to retain permission to connect with the main branch and the freight line has not been recently used so there would need to be an assessment of the track and clearance/maintenance before it could be used again. There is the potential that additional infrastructure would be required if service frequency is increase and/or more services stop in Eccles Road station, especially as the current crossover is within the station. There may also be a need to add infrastructure to increase operational flexibility in this situation or comply with current track standards. More detailed work would have to be undertaken once more is known about the additional services/stops and any impact these may have on the freight operations and the type/frequency of freight use.
- 6.4.8 In summary, any further infrastructure requirements, such as those set out at section 8.88 of the Breckland Integrated Delivery Document (Capita Symonds, 2011), would be dependant upon the proposed rail freight usage. The key issue is therefore marketing of the facility to attract new flows.
- 6.4.9 Due to the distances required to make rail freight cost efficient increasing the use of the Eccles Road freight facility will require targeted action beyond the immediate region. Usage levels may benefit from focussed publicity aimed at large national companies who transport significant volumes of goods and smaller companies that may transport goods over long distances into or out of Norfolk.
- 6.4.10 Typically businesses which require items such as timber, quarried stone, and items associated with power plants e.g. coal or wind turbine parts are attracted by the use of rail transport. Biomass is a potential user although as the aim is generally to use locally sourced materials (within a 50 mile radius) the distance might not be enough for rail to be attractive and cost effective. The cost per mile of rail freight is higher than road transport and there will also be a charge for using the freight site.
- 6.5 TRANSHIPMENT HUB – SNETTERTON HEATH
- 6.5.1 There is already an established logistics facility in Snetterton Heath which could potentially be further expanded subject to demand. Transhipment can take a number of forms primarily Sea to Rail/Road, Rail to Road and Road to Road. East Anglia has three main ports Lowestoft, King's Lynn, and Ipswich which provide a range of facilities to meet the needs of the offshore energy industry, as well as serving industry in Norfolk and Suffolk. Ipswich is the largest handling more than two million tonnes a year, it is also rail connected and intermodal services operate from the port to inland rail terminals. The ports of Felixstowe and Harwich are also significant within the UK shipping industry and are rail connected. There may be some potential for transhipment from these sources although the relatively short distances may mean it is not financially viable. Rail to Road also has some potential as there is the existing rail facility, however, successful expansion of this element would rely on identification and promotion of suitable goods and destinations allowing the option to be cost effective and compete with road transport. Transhipment also occurs when goods which have been transported by road are transferred into smaller vehicles. As this involves additional handling of goods and associated time and requires additional vehicles and drivers most companies will only employ this technique where there is restricted access either through physical constraints e.g. remote locations, or regulatory limitations e.g. height, weight or air quality restrictions.
- 6.5.2 Some transhipment occurs at the existing site but it is generally associated with further processing e.g. bulk delivery of wine for bottling and onward transport. The type of goods and companies that transhipment would benefit are likely to be limited and as most of the area is accessible by larger heavy goods vehicles it is likely that multi-drop deliveries will be favoured over transhipment to smaller vehicles. If a ban on heavy goods vehicles within Attleborough (or other local towns) were to be introduced in conjunction with the development of alternative transport routes than smaller vehicles will have to be used for deliveries and transhipment may become a more attractive proposition albeit at a cost which will be reflected within delivery charges. The existing Snetterton Heath site offers good facilities, should a manufacturer or distributor be interested in developing a transhipment operation with or without a processing facility there is the potential for this to be incorporated subject to necessary planning permissions.

6.6 CAR PARKING AT ATTLEBOROUGH RAILWAY STATION

- 6.6.1 Existing car park at the Station. There is currently car parking on the station forecourt. It appears to be haphazard with no surfacing, lining or signing although users are considerate to each other in how they park their vehicles. There appears to be space for around 35 cars. A section of the forecourt was used for material storage at the time of the site visit, potentially for the changes to the level crossing thus reducing capacity temporarily by around 5 spaces.
- 6.6.2 Currently the buildings do not have an occupier, although were previously used as a vet. Any future plans for the area will need to consider a potential need for car parking spaces for users related to any future occupier.
- 6.6.3 Notwithstanding the proposal at **section x for a transport hubxxxxxx** outside the station of the forecourt, the forecourt could be used for parking, albeit in a more formal manner.
- 6.6.4 Further car parking for commuters. Whilst alternative modes of transport will be encouraged (see section x for Station Travel Plans), there could be merits in providing more car parking nearby. If the hub idea (see section x) is taken forward, it will displace the existing car parking at the station thus requiring an alternative location for car parking.
- 6.6.5 Usually the station car park is part of the TOC lease, when it is on land owned by Network Rail. Where there is formal parking to maintain it is common for there to be a parking charge.
- 6.6.6 The car park options not on Network Rail land are more complicated as they involve third party land and would have to be considered on an individual basis. It is unlikely that the TOC would be interested in managing these and the local authority may have to play more of a role in managing/maintaining.
- 6.6.7 This section seeks to assess, against a number of criteria, options for further car parking at the Railway Station. It should be noted that these are ideas for consideration at this stage. The landowners have not been approached. Furthermore the maps (see figure **x**) simply show where the area under consideration is and does not constitute an allocation. It is acknowledged in the table below that there are various issues to consider for each of the potential options and some are likely to not be deliverable.

Figure 21 Potential locations assessed for further railway station car parking.



6.6.8 The following sites have been identified for assessment from site visits as well as desk top studies. A maximum distance of 200m from the station has been used as guidance for choosing sites to investigate. The following notes are of relevance:

- i Measurement reflects the likely walking route and is not as crow flies. Level Crossing used as this is the point at which users will go to the platform for the journey they are taking.
- ii The cost was based on 2.5m by 5m for a standard bay. Excludes disabled bays which are typically 4.5 by 5m. Also based on 6m access and travelling area around the car parks. Based on a format as set out below. Exact format would reflect the shape of the land allocation as well as site related traffic management.

car
car
car

car	car
car	car
car	car

car
car
car

iii The cost is based on Capita Symonds' experience. If surfacing only: £50 per m². If a new car park: £100 per m². Costs exclude CCTV, lighting, drainage, land acquisition, entry and exit design and management as well as landscaping.

6.6.9 When providing parking at the station, the provision of spaces for car sharers could be allocated. There is also potential for such offers as three for free – i.e. three in a car results in free car parking. Furthermore, provision could be made for electric car charging points. See section x.

6.6.10 It is recommended that the following areas are investigated to supplement car parking at the Station:

- The Council Depot
- Banham Poultry

6.6.11 If the Hub recommendation is not forthcoming in a timely, manner, the existing parking can still be used on the forecourt, although in order to provide the maximum spaces in the area as well as allocate disabled spaces, this could be surfaced and lining and signing provided.

6 Public Transport - Rail

Name	Walking distance to station	Current use	Potential no. of standard spaces	Potential cost	Potential delivery mechanisms	Issues to consider	Summary
County Council Depot	40m	Immediately to the south of the railway is a County Council depot. An old railway building and its surrounding land is used for storage.	67 (assumes usage of full area excluding building)	£136,899	This could be delivered as part of any planning application for the area as well as through direct liaison with the landowners.	An alternative location for the existing items that are stored there would need to be found. Any future use of the building could require car parking associated with it. Appropriate consideration made to the listed railway buildings	Good location. Potentially deliverable.
Banham Poultry	90m	Banham Poultry initially moved to this area temporarily as a result of a fire at their premises in Bunn's Bank.	49 (although if building demolished, could allocate more land for more spaces_	£99,497	The company may have plans to move elsewhere in the area leaving this site vacant. There could potentially be a resulting planning application for the current. Car parking for the station could be delivered as part of any redevelopment.	Private land. Current business use. S106 negotiations regarding land allocation and delivery.	Good location. Any change in this area could aid delivery of this option. Relies on allocation in ASHLP as well as negotiation with landowner.
Scout Hut/bowls club car park.	74m	There is a large area of roughly surfaced land that is used as a car park for the Scout Hut and bowls club. It is likely that the car park will only be used for the Scouts in evenings and at weekends. The bowls club could be used to some extent, during the day in summer, although greater use could be weekends and evenings in summer	15 (assumes a small area near to Station Road, although could extend further towards the scout hut)	£30,799	Liaison with the landowner. A stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	Issues to consider are school holidays when activities could be put on for the Scouts which could impact availability and also the issue of rail users who get later trains thus leaving cars in the car park until perhaps early evening. Another issue is control of where commuters park and potentially a need for enforcement.	Good location. Require negotiation with current users. Traffic management through barriers likely to be needed as well as enforcement.

6 Public Transport - Rail

Name	Walking distance to station	Current use	Potential no. of standard spaces	Potential cost	Potential delivery mechanisms	Issues to consider	Summary
Albion Chemical Distribution	80m	The large car park to this business has been surfaced, but during the site visit did not appear fully used.	9 (although there could be potential for more)	£9,536	Liaison with the landowner. A stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	It should be noted that this is private land. Another issue is control of where commuters park and potentially a need for enforcement.	Good location. Require negotiation with current users. Traffic management through barriers likely to be needed as well as enforcement.
Connaught Hall	190m	This community centre has a large car park. Towards the south and east, there is the Health Centre and GP. The community centre is likely to be mostly used in the evening or weekends; the Health Centre and GP during the day.	12 (although there could be potential for more)	£12,101	Liaison with the landowner. A stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	The GP surgery is over capacity which could imply much car use thus increasing the day time use of this car park.	Furthest from railway station. Already surfaced and marked out. Would require liaison with landowner. Traffic management and enforcement required.
Railway Station Forecourt	0m	Currently used for car parking, but in an informal manner.	65 (excluding the central island of the forecourt, although this could impact on the final layout which could reduce the number of spaces.	£113,600	A stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	Potential other uses for this area as set out at section x. Any future use of the building could require car parking associated with it.	Good location. Currently used for car parking. Could be other plans for the area.

6 Public Transport - Rail

Name	Walking distance to station	Current use	Potential no. of standard spaces	Potential cost	Potential delivery mechanisms	Issues to consider	Summary
Extend forecourt.	0m	Green area of amenity open space. Not designated as Open Space on the Proposals Map.	32	£65,845	A stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	Assessment needed to ascertain if should be allocated as open space thus protecting this area of land from development. Appropriate consideration made to the listed railway buildings	Good location. Currently amenity open space. Could be allocated as open space through ASHLP process.
Field behind Council Depot	40m plus journey through the Council Depot of around 90m. 130m in total.	Green area of amenity open space. Not designated as Open Space on the Proposals Map. Could be agricultural field.	54	£109,443	Liaison with landowner and a stand alone project to surface and line and sign with any other traffic managements system, such as barriers.	Would require access through the Council Depot. Assessment needed to ascertain if should be allocated as open space thus protecting this area of land from development. Appropriate consideration made to the listed railway buildings	Second furthest from the Railway Station. Will require an element of the Council Depot to be delivered or access granted. Could be allocated as open space through ASHLP process.

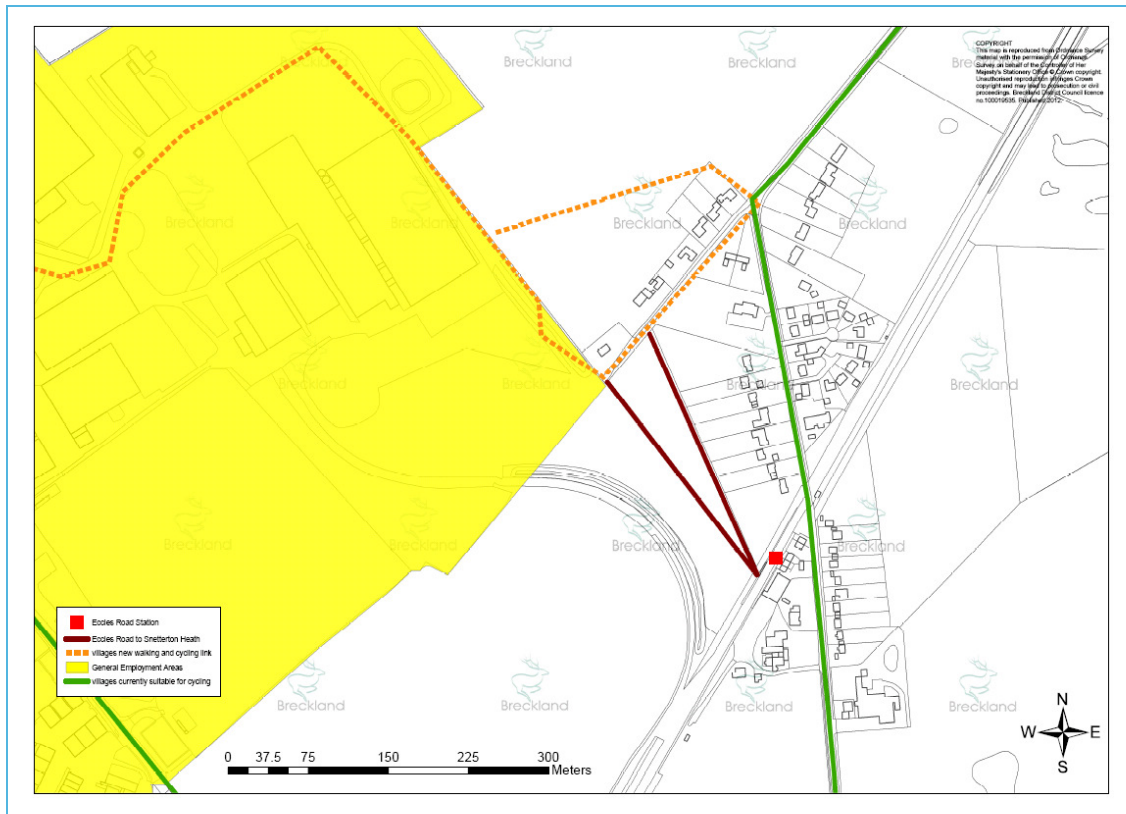
6.6.12 When designing these car parks, the following should be incorporated:

- Surface car park
- Provide 5 Sheffield Stand cycle parking spaces in a convenient location with good surveillance
- Ensure amenity space and trees are provided as part of design
- Signage and lining
- Consideration of CCTV surveillance
- Pay for parking?
- Car sharing spaces.
- Consideration of any nearby listed building.
- Car sharing spaces
- Electric car charging points.

6.7 LINKING ECCLES ROAD STATION TO SNETTERTON HEATH

6.7.1 If Eccles Road Station is used more regularly by employees at Snetterton Heath Employment Area, a convenient, safe and attractive link from the station to the Employment Area will be required. Figure x shows the proposed link. It should be noted that this passes through private land that is agricultural currently. It is intended that the north west platform (Norwich –bound) is used to access a new link to Snetterton Heath employment area with a ramp and steps provided from the platform. If this area of land is developed for employment, the link should be provided as part of the development to link in coherently to the rest of the employment area. If not developed, the link could be provided around the field. The link should be 2.5m wide, shared use with excellent lighting and the provision of fencing should be appropriate and not result in users feel oppressed. It should be noted that where it joins the orange hatched route (see xxx), this route passes through private land/business owned by Richard Johnstone Ltd. A suitable and safe link/route would need to be agreed with the business owner. The business is regularly visited by HGVs.

Figure 22 Potential links from Eccles Road Station to Snetterton Heath Employment Area.



6.8 CONCLUSION

- 6.8.1 Eccles Road Station has a very limited catchment and low passenger numbers, it is likely to be difficult to justify significant expenditure or a substantially improved service based on current demand. The proposed 20ha of additional employment has the potential to generate additional demand but will require a more regular service to fulfil its potential. If the aspiration to have a half hourly service between Cambridge and Norwich is realised this is an opportunity to secure additional stops at Eccles Road.
- 6.8.2 Attleborough has far higher passenger numbers and a larger catchment area. Initial high level demand forecasts suggest that additional services and development may generate a reasonable additional demand and a number of improvements to the station are identified which would improve access for walking and cycling. The development within Attleborough provides an opportunity to increase use of the station substantially and establish sustainable travel patterns. Cycling has been identified as the most practical option therefore investment in direct cycling infrastructure is essential to encouraging use and increasing modal share.
- 6.8.3 The possibility of reconfiguring the platforms at Attleborough is not considered worth while due to high costs and limited benefits.
- 6.8.4 The existing freight facility has good provision but is currently underused and should be promoted extensively to increase potential use.
- 6.8.5 The benefit of a transshipment hub is considered to be limited and able to be fulfilled by the existing logistics site at Eccles Road/ Snetterton Heath.

Key Rail recommendations

- Set targets for increased use of sustainable modes of access to Attleborough station based on the current modal split and identify methods for achieving modal shift
- Improvements to Eccles Road Railway Station: demarcate pedestrian area where there is no footway; provide step-free access to platforms; review shelter provision; provide cycle storage
- Improvements to Attleborough Station: review access provision in conjunction with level crossing replacement and new access complete to identify further improvements required; provide improved footway to Cambridge platform; investigate the possibility of returning the former station buildings in to use for waiting area; review parking provision (estimate parking requirements and opportunity to expand); improve cycle storage (add canopy and signage as a minimum)
- Review demand forecasts as proposals for development are confirmed & consider if this requires an increase in capacity of existing services either through lengthening trains or increasing frequency. If the increase in base demand (with development) is sufficient to justify frequency enhancements for train services these in themselves will generate more demand due to the increase in travel opportunities for the wider Attleborough area
- Develop costs once options developed in more detail
- Encourage greater use of freight facility through identification of potential new users and publication of capabilities and assistance available (Mode Shift Revenue Support)
- Potential for transshipment hub to be reviewed once it is clear if HGVs will be banned from the centre of Attleborough or other towns in the area.

7. Car Share

7.1 INTRODUCTION

- 7.1.1 Car sharing is a simple way of improving the efficiency of existing trips and reducing the number of vehicle trips on the highway network. The key element to the success of any car sharing scheme is it is as convenient as a single occupancy car trip and saves users money. Car share schemes are commonplace within large work places and based on previous successes are considered a very effect measure, especially if promoted through a Travel Plan.
- 7.1.2 The effectiveness of car share schemes relies on three key points;
- Promotion of the Scheme – users/potential users need to be aware of the scheme’s existence.
 - Information – users must know where and how to use the car sharing scheme. The information must be kept up to date and easy to access.
 - Critical Mass of Users – schemes benefiting from a larger number of persons registered ensure the chance of a greater number of suitable matches.
- 7.1.3 Car sharing could be considered most successful/relevant for commuter trips as journeys have a common destination or starting point as well as common time of the day. Therefore, the promotion of car sharing to people employed within Attleborough town centre, the employment areas south of the railway line, Snetterton Heath and Bunn’s Bank might provide the largest reward.

7.2 OPPORTUNITIES IN THE AREA

- 7.2.1 Large employers in the Attleborough area are few in number, however there are still opportunities for car sharing to be effective.
- 7.2.2 Businesses such as Sainsbury’s and Banham Poultry could experience significant reductions in car trips if enrolled within a car share scheme. Smaller businesses in the town centre such as local shops, cafes and pubs could experience some benefits of car sharing but fewer members of staff can reduce the effectiveness of a Car Sharing Scheme. The ability to provide a link between all small businesses and potential car sharers may provide the most effective opportunity to increase the popularity and success of the scheme.
- 7.2.3 The schools located within Attleborough could also experience good reductions in staff and pupil trips through the promotion of car sharing. Encouraging pupils to car sharing could substantially reduce morning peak hour trips.
- 7.2.4 The greater the number of users registered the more successful a car sharing scheme will be due to the increase in potential matches. Therefore, an alternative approach to increase the opportunities in the Attleborough area would be to target residential areas and business in an area rather than solely businesses on their own. It is important any tool used to provide matches between users is easy to use and available to all in the Attleborough area to capture any overlap between trip destinations.
- 7.2.5 Norfolk County Council currently has a website dedicated to car sharing (www.carsharenorfolk.com) that allows drivers to find suitable matches for similar trips within the Norfolk area through the website. The website, which is free to register and use, also provides the ability for car sharers to calculate how much money they are saving, receive regular emails of updates for users of the site and the promotion of such events as ‘Liftshare Week’ help to keep lift sharing in the public eye. The website is both easy to register on, navigate around and could be a very powerful tool in promoting car sharing for trips to and from Attleborough.
- 7.2.6 Another sharing scheme operated by Liftshare.com involves registering a taxi journey and looking for matches. Similar to car sharing, costs are shared and the journey is as convenient as a car.

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The thing is, loads of other people are using taxis regularly too - and some of them live near you. So shouldn't you be sharing the journey - and sharing the cost?

As well as saving you money, using TaxiBUDI means you don't have to worry about parking - plus if you travel on roads with bus and taxi lanes, it'll save you time too!

TaxiBUDI can be used for regular trips - such as the daily commute or going to the station - as well as occasional trips such as a night out or getting to the airport or hospital.

It'll also tell you how much money and CO₂ you're saving compared to making that journey on your own - and you'll wonder why you didn't start taxi-sharing years ago!

[Join for FREE!](#)

- 7.2.7 Feedback received from the owners of the website, who are based in Attleborough, identified where it has been well promoted there has been a greater uptake. Therefore, it is essential the website is promoted through various media within the town centre and via employers themselves. This would provide the most effective opportunity in developing a car sharing scheme and delivering reductions in car trips.

It is recommended that:

- Travel plans written for any existing and future developments within the boundaries of the town should as a measure seek to promote car sharing through the County Councils website. Bespoke schemes could also be promoted, although there is scope to create specific groups to promote car sharing.
- The existing school Travel Plans should be updated to reflect any developments for car sharing including referencing the County Councils Website.
- Travel plans should be used as one of the main media to promote car sharing.


- 7.3 PRIORITY CAR PARKING SPACES FOR CAR SHARERS
- 7.3.1 Common place in most city centres, work places and some supermarkets, car park spaces for car sharers could be installed in the town centre car park to promote more efficient use of car journeys. Spaces generally are located in what would be considered more accessible and more preferred spaces in the car park to further emphasise the benefits of car sharing.
- 7.3.2 Priority parking for car sharers promotes journeys by cars into the town centre and if marketed correctly can highlight the benefits of car sharing when travelling to work outside of Attleborough, potentially further reducing journeys by car. Scottish authorities and various universities such as Edge Hill in Lancashire have enjoyed successes implementing the scheme through a permit system and linking the priority spaces with a car sharing initiative.
- 7.3.3 Negatives of the scheme can include the lack of enforcement of car sharing parking spaces which can reduce the effectiveness of the scheme due to increased costs. The bays can, if not used, result in a reduction in capacity of the car park which could be considered counterproductive.
- 7.3.4 Lessons learnt from other schemes are important in ensuring any future scheme within Attleborough is successful. Linked to priority parking, Edge Hill University have introduced a guaranteed lift home policy that ensures persons taking part in the scheme who require a lift if an emergency occurs is guaranteed by the University.
- 7.3.5 Costs would relate to the signing and lining as well as the marketing. Enforcement/management of the administration of the scheme would also be an ongoing cost.


Case Study Box x: Edgehill University²²


Do you want to...

SAVE MONEY on fuel costs?
SAVE TIME by reducing congestion?
MEET new people?
REDUCE environmental pollution?
ENJOY priority parking on campus?

Then car sharing could be for you!

 If half of UK motorists car shared one day a week, congestion would be reduced by 20% Liffshare

 There are 10 million empty seats on the UK's roads every day DETR

 Giving one person a lift could halve your fuel costs and save you around £1000 a year Liffshare

What is car sharing?

Car sharing is when two or more people share their journey and travel together.
It's really flexible; choose to share every day or just once or twice a week – whatever works for you.

Staff and student schemes

To make it as easy as possible for you to car share, Edge Hill University, in association with Liffshare, have developed two groups; one for students and one for staff.
It's completely FREE to join and use and you don't need a car to take part.

How do I register to car share?

- Log on to edgehill.ac.uk/carshare
- Click the 'Register to Car Share' icon and select either the staff of student scheme.
- Register your details and enter your journey.
- Activate – once registered you will be sent an email. Follow the link to activate your account.
- Search – enter the details of any journeys you want to make and the system will find other members of the Edge Hill Staff or Student car share group travelling the same way.
- Contact a match – use the secure system to contact someone making a similar journey to you.
If you don't find a match using the Edge Hill car share groups you can widen your search to the whole of the UK. The system will log your journey and notify you when a suitable match is found.
- Share – saving hundreds of pounds a year!

How do I use the priority parking spaces for car sharers?

To use the reserved parking area in Car Park A you need to apply for a Car Share Permit.

- Find at least one other person to share your journey with. You can search the Edge Hill staff or student car share database by following the instructions above.
- Each member of the team must be eligible for a Car Parking Permit and be registered on either the Edge Hill staff or student car share group to confirm they are potential matches.
- Complete the application form to the right and return to the FM Helpdesk in the Durning Centre by hand or via internal post
- The lead contact will be emailed once all details have been verified and the permits are ready for collection.

For more FAQ's, visit edgehill.ac.uk/carshare

Car Share Permit Application

Lead Contact

Name: _____

Staff: Student: (please tick)

Student ID (if applicable): _____

Postcode: _____ Permit No: _____

Member 2

Name: _____

Staff: Student: (please tick)

Student ID (if applicable): _____

Postcode: _____ Permit No: _____

Member 3

Name: _____

Staff: Student: (please tick)

Student ID (if applicable): _____

Postcode: _____ Permit No: _____

Member 4

Name: _____

Staff: Student: (please tick)

Student ID (if applicable): _____

Postcode: _____ Permit No: _____

It is recommended that:

- The potential for car sharing spaces at the key car parks in the town be investigated further with the potential of being included in the town centre report.

²² <http://www.edgehill.ac.uk/documents/sustainability/CarShareLeafletApplicationForm.pdf>

CAPITA SYMONDS

Attleborough Smarter Choices Final Report
29/11/12

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7.4 CAR CLUBS

- 7.4.1 A car club scheme would provide an alternative for persons commuting to Attleborough by train or bus nationally or to Norwich. Common place in cities such as London, Liverpool, Leeds and large towns, a car club would provide a higher level of convenience than pupil transport but reduces the number of cars travelling into the town centre. There could also be benefits on the streetscape and potential benefits to pedestrians through potentially fewer cars to find spaces to park.
- 7.4.2 On the spot hires for periods of one hour or longer provide a flexible hire term and vehicles are normally fitted with payment facilities.
- 7.4.3 The car club must be located at a convenient point close to the main modes of public transport. Given the central location of the train station and the parking facilities (see section x regarding car parking at the station and section x regarding future buses stopping near the station) this forms the best location for any potential car club as it provides the best link with public transport journeys from further afield. A location upon Church or Exchange Street could also be considered suitable as these would provide links to the bus services within the town centre. If there was the demand cars could be located within residential areas.
- 7.4.4 Often smaller populations are not necessarily conducive to car clubs, although this depends on the set up and how low cost the scheme can be run. The biggest cost is the car and insurance as they are often run by volunteers. There needs to be long term commitments with continued marketing for such a scheme to work and it takes time to build up membership.

Case study box x: Wombat Car Club²³

The scheme has 2 cars and 30 members and operates in Colchester which has a population of 80,000 people.

Step 1 - Join

Sign-up to become a member by clicking on the Express an Interest Button. The Wombat Manager will then call you to arrange a visit.

Step 2 - Reserve

Once you've joined you'll be given access to the booking calendar and the code to the key boxes. Then you're ready to book your time-slot which will show you when your chosen car is available. Book a short journey, a day trip or an evening out, it's up to you...

Step 3 - Unlock

Collect your Wombat car from its location and use the key from the key box to open it.

Step 4 - Drive!

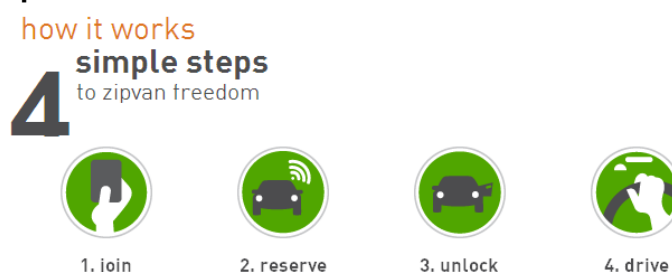
From here on you just drive. The car will have fuel and be ready to take you on whatever adventure you have planned for your time-slot. If you need to fill up, use the fuel card supplied at any major filling station. We ask that you leave at least quarter of a tank of petrol at the end of your journey ready for the next member. At the end of the month you will receive an invoice with a breakdown of your journeys and the cost.



²³ <http://www.wombatcarclub.co.uk/index.asp>

- 7.4.5 The first step would be to contact Car Plus (<http://www.carplus.org.uk/>). Carplus was established in 2000 to support the development of car clubs and ride-sharing schemes in Britain, in response to growing environmental concerns around private car use. Over the past decade, Carplus has played an active role in the introduction and growth of the car club sector in the UK. From a handful of community-led car clubs there are now over 150,000 members in England alone. These members have access to over 2000 vehicles in over 50 locations across England, Wales and Scotland.
- 7.4.6 Given the size of Attleborough and the lack of large scale commercial businesses within the town, it may not be commercially viable to operate a car club scheme. Future growth aspirations of the town could result in a change of position. If an appropriate vendor could be lobbied an initial scheme could be trialled. The key element is demonstrating to a potential vendor there is the necessary demand, but the publicity gained by any scheme could be an attractive prospective to any vendor.
- 7.4.7 Van clubs involve joining a scheme and paying an annual amount, with a set charge per hour or day for a set number of miles. Similar to car clubs, they are ideal for moving house or moving something that is too big for a normal car boot.

Case Study Box x: Zipvan



Wander up to the van, then just hold your Zipcard to the windshield
(or tap your mobile app), and it's yours to drive.

*Operates in Bristol, Oxford, London and Cambridge

*Annual fee of £19.50.

*Depending on the model, drive from £9/hour and £84/day (any 24-hour period) during the week and £10/hour and £95/day on weekends.

Fuel, insurance and 40 FREE miles are included. Additional miles from £0.29

*Online reservation system

*24/7 roadside assistance and member services hotline

*Users fill the tank using the fuel card inside the car when it gets to 1/4 full. Or is it 3/4 empty

*Members have the option to purchase a monthly or annual damage fee waiver to reduce that amount or to eliminate it altogether.

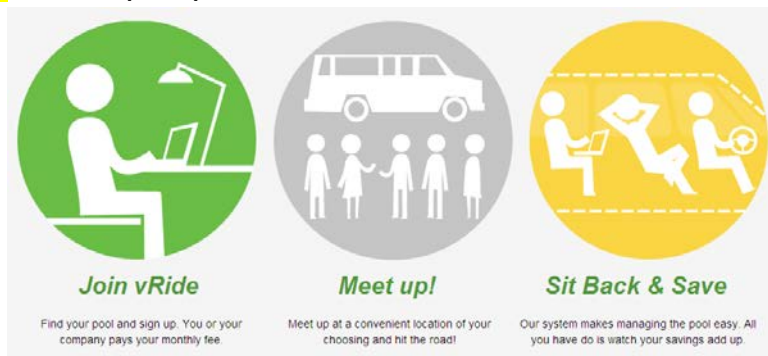
It is recommended that:

- As the town grows and changes, perhaps as part of any Travel Plan to accompany the planning application, discussions with car club providers and Car Plus are undertaken.
- If a car club were to be set up, a van could form part of the fleet.

7.5 VANPOOL/MINIBUS POOLING²⁴

- 7.5.1 This is where between 7 and 15 people travel to work regularly in a minibus/van. Whilst very popular in the USA (where there are 10,000 vanpools), and becoming more popular in the Netherlands, there are not many examples in the UK. There is a voluntary driver, who takes the vehicle for private use, as well as a reserve driver and passengers. Expenses are shared amongst the group.
- 7.5.2 The benefits to companies for using minibuses include reduced need for parking facilities and enhanced punctuality. Like car sharing, vanpools offer the comfort and reliability of a car.
- 7.5.3 Vanpools have not been widely implemented in Europe, and hardly at all in the UK. In Europe a special driving licence is required to drive a van carrying more than eight passengers, compared with a limit of 14 passengers in the USA. Furthermore, in the UK, employer-supported vanpools for commuting would be taxed as a benefit-in-kind by the Inland Revenue and the main driver of a vanpool would be considered, for tax purposes, to have been allocated a company car and therefore would have to pay tax on the capital and any fuel benefits received. Although the accident record of vanpools is good, insurance companies have so far been unwilling to take on the risk.
- 7.5.4 Vanpools work best when employees working for the same company live relatively near each other in suitable clusters, but more than 25km from their workplace. Such situations are commonplace in the USA, but in the UK the majority of people live within 15km of work.
- 7.5.5 Whilst it is not recommended that the vanpool model be implemented in the area per se, as part of area wide travel plans, there could be scope of organisations to get together to provide mini buses that pick employees up. There could be particular relevance for businesses that operate outside normal public transport times.

Case Study Box x: vRide (USA)



vRide is a ridesharing platform that saves commuters money on their way to work. The ride-matching system links 5-15 people with similar commutes and helps them save money and time on their commute. vRide owns the van which is provided on a lease basis to a committed volunteer vanpool driver with a minimum 30 day lease. The monthly lease cost of the van plus monthly fuel costs are divided equally among all of the vanpool members. Maintenance and insurance are provided by vRide.

²⁴ Pooling together: why the vanpool works in the US and the Netherlands, Marcus Enoch, The Open University, 2003, https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/3417/1/enoch_vanpooling_tec_paper.pdf

7.6 CONCLUSION

7.6.1 Car sharing is just as convenient as driving in a single occupancy car use. It can reduce costs and reduce traffic on the road. Car sharing should be an integral part of Travel Planning. With Liftshare being based in Attleborough, there appears to be great potential for car sharing to be a success in the area.

The key car sharing recommendations are:

- Car sharing should be promoted through travel plans which would provide full details for all users;
- The existing NCC car sharing website should be actively promoted as part of the travel plan, or a new website should be constructed to guarantee maximum success of the scheme;
- Priority parking spaces for car sharers should be identified and marked out within the main car parks within the town; and
- An approach should be made to various companies that successfully run car clubs elsewhere about implementing such a scheme within Attleborough.

8. Using More Efficient and Low Carbon/Alternatively Fuelled Vehicles

8.1 INTRODUCTION

8.1.1 Alternatively fuelled cars offer reductions in running costs, fuel emissions and noise which would improve the environment within Attleborough. The promotion of such vehicles would not seek to reduce the number of vehicles within Attleborough but just reduce the impact of the vehicles upon the town's environment, reduce emissions and sustain its heritage.

8.1.2 The promotion of environmentally friendly vehicles may also highlight sustainability and encourage more trips by alternative modes of transport due to a change in attitude.

8.2 OPPORTUNITIES

8.2.1 The installation of electric charging points within the town would promote and facilitate the use of electric cars increasing the potential opportunities. Charging points do not have to be restricted to petrol filling stations and if practical to do so can be installed anywhere. The conversion of parking spaces to electric "hook up points" for vehicles would also promote the use of alternative fuels and suit the existing practises of the town, park up, connect up the vehicle, complete your shopping and drive away.

8.2.2 The success of charging points and the scheme somewhat also depends upon the charging times of vehicles. Charging points work on a three tier platform based upon the speed at which they charge a vehicle, as shown below;

- Slow Charge – 240v, 13A single phase capable of overnight/daytime charge;
- Fast Charge – 240v, 32A three phase, 30 minute recharge; and
- Rapid Charge – 500V, 200A three phase, full charged within 5 minutes.

8.2.3 It is important the correct infrastructure is installed if electric vehicles are to be promoted. Most electric car manufacturers recommend that a standard 13 amp socket for charging your electric car at home should not be used for safety reasons. If a standard 13 amp socket is used, the rate of charge will be severely restricted by the car manufacturer so that it may take up to 12 hours to fully charge the car. As such, specific charging infrastructure is required, such as Chargemaster Plc domestic charging unit²⁵.

8.2.4 Faster charging times as a result of the correct infrastructure ensures the use of an electric vehicles is comparable with petrol vehicles and less of a time burden for users. Current practise is to waver charges for users of charging points as the cost of electricity is relatively low and the publicity generated as a result of installing charging points is considered far more beneficial. Typical installation costs can vary between £5,000 – and £50,000 dependant on the specifications; a typical fast charge point costing approximately £5,000²⁶.

²⁵ <http://www.chargemasterplc.com/index.php/applications-home/>

²⁶ <http://www.nextgreencar.com/electric-cars/car-costs.php>

- 8.2.5 If charging points within the town centre aren't considered suitable lobbying of the local petrol filling station or an incentive for the petrol station to install a charging point may provide a suitable alternative. To meet the requirements of the petrol station and ensure its commercial viability a Rapid charge point would be the best option. Given that the local petrol filling station only supplies regular fuels, it may be unrealistic to assume that without financial help the infrastructure for supplying either electricity or alternative fuels would be installed. Therefore, it must be assumed any scheme would have to receive financial backing from other sources.
- 8.2.6 Ideally fast charging points should be installed at convenient points within the town centre either within the existing main car park or on Church Street or Exchange Street. This would ensure vehicles could be recharged whilst users complete their activities and ensure maximum publicity by locating spaces in areas of high footfall. The conversion of parking spaces to electric charging points could be linked with a pay per drive (car club) scheme to provide vehicles for visitors to the town. The initial implementation of an electric car club scheme may also help to promote alternative fuels within the town centre.
- 8.2.7 The promotion of alternative fuel sources and vehicles must be done through various media across the town such as travel plans, local paper and the town council. Arranging events such as a demonstration of alternatively fuelled vehicles to local residents at a local fete or fair may provide the catalyst needed to encourage their use.
- 8.2.8 Information should also be made available to residents on government grants which are currently available for help with purchasing certain environmentally friendly cars as is help with providing information on the most efficient and cost effective cars to buy. Further information can be found websites such as www.nextgreencar.com which provide up to date information and news on energy efficient cars. This is covered in more detail in the delivery section, section x.
- 8.2.9 The relative infancy of environmental friendly vehicles, especially full electric vehicles, approaching manufacturers of such vehicles for help and information may well result in publicity for the town and help with reducing the costs of installing such technology.

8.3 BUSINESS VEHICLE FLEETS

- 8.3.1 Business fleets can benefit from tax benefits and an improved corporate image if they choose to use alternative fuels. Both these points can be used to promote alternative fuel usage for businesses within Attleborough.
- 8.3.2 Large business fleets within the Attleborough area are few in number so any work must concentrate on the smaller businesses which may be keen to seek a more sustainable profile. None the less, work could also include large business fleets which may travel through Attleborough, included within this are the business fleets of Banham Poultry and Foulger Transport.
- 8.3.3 Travel plans for current and future business developments which will operate a fleet of vehicles within the town should be used to promote the use of alternative fuels. Businesses could also be encouraged to use electric vehicles as part of a car club for short business trips etc. This may help to provide the business case for the introduction of an electric vehicle car club in the town.
- 8.3.4 In line with government policy both Norfolk County Council and Breckland as a Local Authority should aim to reduce emissions from vehicles used for business purposes. Therefore, any vehicles operating for either body within Attleborough should at the very least be asked to use the cleanest fuels available.

Case Study Box x: Green Frog Taxis

For the Greenest prices in Norwich call
01603 744 747

Drive for us
Click here

greenfrog
PRIVATE HIRE

HOME OUR CARS & PRICES THE ENVIRONMENT FAQS CONTACT US

Our fares won't cost the Earth.

Welcome to Green Frog taxi's

Green Frog is a brand new Norwich taxi company with over 20 Years experience offering an unrivalled level of customer service.

We are the first and only company in Norfolk offering a fleet of Hybrid only cars, saving you money and helping reduce your impact on the environment. We are covering all Norwich Areas, Airports and Sea Ports. Any distance is catered for.

Hop in for a Greener Future!

Why us

- Local Taxi company with over 20 years experience
- The only company in Norfolk with Hybrid only cars
- Saves you money and helps the environment
- Any distance catered for!

CHECK OUT OUR GREAT INTRODUCTORY OFFERS! [CLICK HERE](#)

VISA MasterCard

8.4 PUBLIC TRANSPORT – ALTERNATIVELY FUELLED VEHICLES

- 8.4.1 As with business fleets, the operators of public transport vehicles such as bus and trains always use technologies that are reliable and cost efficient. Therefore, the use of alternative fuels/vehicles in public transport is dictated by the technology at the time and the will of the operators to invest in new technologies.
- 8.4.2 Alternative powered buses are in existence such as gas hybrid buses used in Merseyside or Hydrogen Fuel Cell powered buses used in limited numbers across Europe. However, they do remain expensive to purchase and maintain which can keep them out of reach of smaller bus operators who might seek to service routes within Attleborough.
- 8.4.3 Encouragingly Anglian Bus is the first operator in England to run a fleet of thirteen completely LPG (gas) powered buses between Great Yarmouth and Lowestoft after being successful in securing funding from the Depart for Transports Green Bus Fund (April 2012). Dependant on the success of the vehicles Attleborough may well be served by fully gas powered buses in the future. However, at the time of writing written correspondence received from the main bus operator "First" identified they have no plans to upgrade buses serving Attleborough to alternatively power sources.

- 8.4.4 In the interim, bus companies operating within Attleborough should be encouraged to use ultra-low sulphur diesel fuels²⁷. Ultra-low-sulfur diesel (ULSD) is diesel fuel with substantially lowered sulfur content. Throughout the European Union, the “Euro IV” standard has applied since 2005, which specifies a maximum of 50 ppm of sulfur in diesel fuel for most highway vehicles, where as ULSD is less than 10 ppm. Vehicles using ULSD do experience a reduction in fuel economy but experience dramatic reductions in emissions resulting in improvements to air quality.
- 8.5 STANDARDS FOR EU
- 8.5.1 Through advances in technology as a result of European Union Policy Directives modern vehicles will continue to improve in efficiency but also reduce their carbon emissions. Since June 2007 the European Union has set mandatory standards for both fuel efficiency and carbon emissions with further improvements/reductions in both 2015 and 2020.
- 8.5.2 Therefore, as newer vehicles are purchased by residents and business users within Attleborough the carbon footprint of vehicles will decrease. However, it is important to note that older vehicles will still remain unaffected by such changes in policy and work should still continue to reduce the number of vehicles on the highway.
- 8.6 PRIORITY PARKING PLACES AND CHARGING POINTS
- 8.6.1 To encourage the use of alternative fuels specifically electric powered cars a priority parking scheme as with car sharing could be implemented. This idea would seek to reward drivers who are reducing their carbon footprint further increasing the benefits of the scheme.
- 8.6.2 Charging points could be installed at priority parking spaces within the town centre car park or on either Church Street or Exchange Street. Ideally the most visible parking spaces close to high pedestrian footfalls should be chosen as this would help promote the use of charging points.
- 8.6.3 Countries such as Sweden have adopted a blanket policy of free parking for all electric vehicles and closer to home London has taken the lead with electric vehicles and has adopted specific planning policies to encourage the installation of the necessary infrastructure to facilitate electric vehicles. Currently there are no parking charges within Attleborough, but as part of future measures if charges were introduced electric vehicles could be exempt from the charges to encourage their use. This may form a suitable alternative measure to priority parking as it doesn't necessarily reduce the capacity of the car park.

Case Study Box x: Electric Vehicle Charging Bays Arrive in Central Milton Keynes²⁸

Milton Keynes Council has installed 25 charge points, capable of charging 50 electric vehicles, in Central Milton Keynes. Parking will be offered free of charge to electric vehicles when parked in these designated spaces, irrespective of whether the vehicle is charging. Non electric vehicles will be able to use the electric vehicle spaces during the core hours of 10am – 4pm, subject to the existing restrictions (e.g. pay and display). As well as free parking, we will also be providing free electricity as an additional incentive for drivers considering a purchase of a sustainable and environmentally friendly electric vehicle. In order to access the free electricity, users must pre-register to become a member of the scheme. This is to prevent unauthorised use of the free electricity e.g. by travelling fairgrounds, kebab vans, etc. The annual cost to become a member of the scheme is £50.

²⁷ The Route to Cleaner Buses, A Guide to Operating Cleaner, Low Carbon Buses (Transport Energy)

<http://www.cleanaccessibletransport.com/Revised/Reports%20for%20publication/CleanBusGuide.pdf>

²⁸ <http://www.milton-keynes.gov.uk/mkparking/displayarticle.asp?ID=73757>

8.7 CONCLUSION

8.7.1 Alternatively fuelled vehicles are not a new thing, but are becoming more common, especially for business use. This could reflect the increasing price of petrol and diesel as well as environmental concerns related to vehicle emissions.

8.7.2 The Government has formed an Office for Low Emission Vehicles and have produced a national strategy for plug in vehicle infrastructure (discussed in more detail at section x). As Attleborough and Snetterton Heath grow and change, it is important that infrastructure for alternatively fuelled cars is provided

The key recommendations related to alternatively fuelled vehicles are:

- Fast or Rapid electric vehicle charging points should be installed in convenient locations such as the main Queens Square car park or Church Street;
- Liaison with local businesses to inform them of the benefits of alternatively fuelled vehicles should be undertaken;
- Priority parking spaces should be installed in the Queens Square car park for electric vehicles;
- Local petrol stations should be approached about installing a rapid charging point;
- Makers of electric vehicles should be approached to provide demonstrations and information at school fairs or town centre gatherings to increase awareness of new technologies;
- Companies that operate electric vehicle car clubs should be approached about implementing such a scheme within Attleborough; and
- Local authority vehicles and buses operating within Attleborough should be requested to use ultra low sulphur diesel fuels.
- As part of Travel Plans for businesses, the potential for alternatively fuelled business vehicles should be considered.

9. Using Existing Vehicles More Efficiently

9.1 INTRODUCTION

- 9.1.1 The promotion of using existing vehicles more efficiently does not attempt to reduce the number of vehicles using the town centre but aims to reduce the impact of existing vehicles.
- 9.1.2 Promotion of a more passive driving style would reduce air pollution, increase road safety within the town centre and help provide a more pedestrian friendly environment by reducing vehicle speeds and increasing awareness of existing infrastructure such as the courtesy crossing points. Increasing people's awareness of cost savings and more efficient use of vehicles could also potentially result in fewer journeys by car by helping to change people's attitudes.

9.2 GREEN DRIVING TIPS – HOW TO ADVERTISE

- 9.2.1 Greener driving tips could be advertised in well exposed places throughout the town through different media. The use of local papers to promote items such as “tip of the week” or “did you know” sections could help promote more efficient car use. Information boards within the existing car parks could also be used to display similar information or tips and would be directly aimed at car users within the town centre. Various motoring organisations such as the AA and RAC readily offer green driving tips on the internet and if approached may be happy to provide information to display within the town. The same media should be used to promote green driving courses.

Tips include²⁹:

Tyres: check tyre pressures regularly and before long journeys; under-inflated tyres create more rolling resistance and so use more fuel (check the handbook and increase pressures for heavier loads as recommended)

Leave promptly: don't start the engine until you're ready to go as idling wastes fuel and the engine warms up more quickly when you're moving; in the winter, scrape ice rather than leave the car idling to warm up

Don't be idle: if you do get caught in a queue, avoid wasting fuel – turn the engine off if it looks like you could be waiting

9.3 GREEN DRIVING COURSES

- 9.3.1 Greener driving courses could be seen as the ultimate manifestation of promoting more efficient use of vehicles. Informing existing drivers of the health and financial benefits of better driving and teaching such techniques within the town centre environment could deliver real benefits.
- 9.3.2 At the time of writing Norfolk's Road safety team provides such a course known as an eco friendly driving scheme³⁰ it aims to promote safer and more efficient driving. The course provides information on alternative fuel choices and driving tips that help reduce both fuel bills and emissions.

²⁹ http://www.theaa.com/motoring_advice/fuels-and-environment/drive-smart.html

³⁰ For more details on the scheme contact: 01603 223361 or roadsafety@norfolk.gov.uk

9.3.3 Such a course wouldn't aim to reduce vehicles within the town centre, but through the promotion of a greener driving style people's awareness of a more sustainable approach to transport and a different way of doing things.

9.4 GREEN DRIVING BUSINESSES

9.4.1 The promotion of greener driving to business fleets within Attleborough and surrounding areas could potentially have a large impact and reduce their carbon footprint upon the town. Informing business of the potential cost savings from better fleet management and improved driving techniques could help gain support through the town and provide mutual benefits for both business and residents alike.

Case Study Box x: Foulger Transport³¹

Locally Foulger Transport a large haulage company operating approximately one hundred vehicles that are based in Snetterton Heath has worked in partnership with the REACTIVE³² team to create a more sustainable operation which would ultimately reduce operating costs. This included sending company drivers on fuel efficient driving training courses to increase driver awareness. The REACTIVE team is a government funded initiative which provides free information and services for all business types to help reduce their carbon footprint.

9.4.2 The initiative demonstrates how a business local to Attleborough whose transport fleet could impact upon the town has taken measures to reduce their carbon foot print and costs through improved use of existing vehicles. This example should be used to inform businesses within Attleborough of the benefits both financially and environmentally of improving driving styles.

9.5 A ROLE FOR DRIVING INSTRUCTORS?

9.5.1 Existing driving instructors could be used to mentor existing drivers to help promote a safer greener driving style within and around Attleborough. The driving course could also be promoted as part of driving lessons for new drivers. The use of driving instructors to run and promote the courses would instil confidence in drivers that there are real benefits to adopting a different driving style. They also form the most ideal persons/professionals for the task considering they would already be qualified and have all the necessary equipment such as an appropriate car and insurance, although this maybe a costly exercise.

9.6 CONCLUSION

9.6.1 Whilst not seeking to attain modal shift to more sustainable modes of transport, and not promoting active travel, driving in a more efficient way is an important part of the Smarter Choices strategy. Many outlying rural areas without convenient access to public transport rely on driving to perhaps travel to Snetterton Heath for work, or to Attleborough for shopping or secondary school. By promoting efficient driving, the residents/local businesses could save money and emissions from motor vehicles will reduce.

Key recommendations regarding using vehicles more efficiently are:

- As part of any future travel plans the coordinator should attempt to negotiate discounts on driving courses from NCC or appropriate driving instructors; and
- All future developments within Attleborough requiring a travel plan should provide details of greener driving courses and better use of existing vehicles including displaying information in reception and congregation areas.

³¹ <http://www.reactive.co.uk/userFiles/Documents/CaseStudies/web-rev-active-foulger-case-study.pdf>

³² www.reactive.co.uk

10. Travel Plans

10.1 INTRODUCTION

10.1.1 A travel plan is an evolutionary document whose main focus is to influence the travel patterns of any visitors or staff to or from the development for which it is concerned. Through careful analysis of travel behaviours and the planning of transport resources the travel plan will try and reduce the number of trips which rely on a car by providing alternative modes of transport. Travel plans can provide many benefits such as;

- Reduced Congestion;
- Reduced Environmental Impacts
- Reduced journey times; and
- Promote Active Travel

10.1.2 A travel plan is the key tool in linking and coordinating all aspects of smarter choices and should be used to monitor the success of and adjust measures implemented.

10.2 ATTLEBOROUGH AND TRAVEL PLANS

10.2.1 Currently the only developments within Attleborough which have a travel plan are the schools due to the former NCC travel plan team and various incentives at the time. No other developments within Attleborough have a travel plan because no new development in recent years has been large enough to trigger the need for a travel plan as part of planning conditions.

10.2.2 NCC's current policy is to ask a developer to produce a travel plan in the following scenarios;

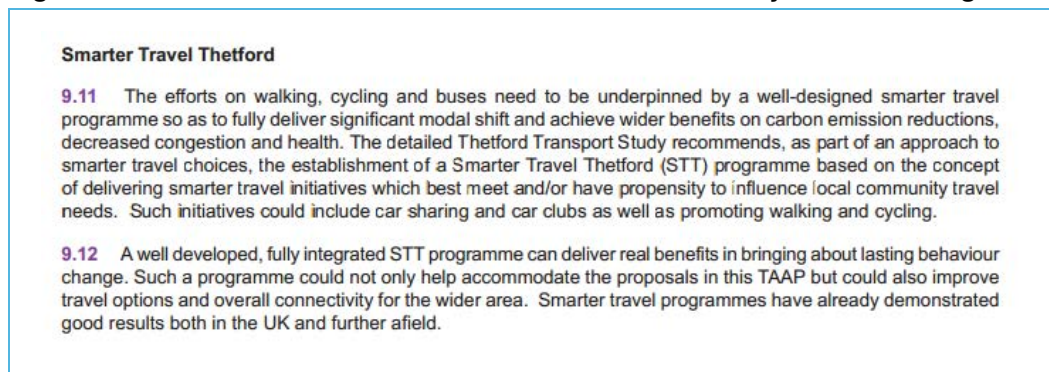
- i When a Transport Assessment is required;
- ii When a travel plan would help address a particular local traffic problem associated with the planning application, which might otherwise have to be refused on local traffic grounds;
- iii When the development is likely to have an adverse affect on sensitive locations (e.g. heritage and conservation areas or air quality management zones);
- iv When the development is likely to exacerbate on-street parking in the locality;
- v When the development is likely to exacerbate local congestion and safety problems; and
- vi When the development is in an area where there are local initiatives or targets set out in the development plan or local transport plan for the reduction of road traffic, or the promotion of public transport, walking and cycling. (Applies particularly to offices, industry, health and education uses).

10.2.3 Moving forward it is recommended that, in the Attleborough area, given the local concerns regarding traffic, NCC give consideration to requiring Travel Plans for developments of a certain threshold. This would ensure that future development would be more informed of smarter choices and would follow a more sustainable approach to transport.

10.2.4 Existing businesses could be encouraged to "retro fit" and develop a travel plan around their business. This may prove to be a difficult task as a travel plan might be seen to be a costly exercise and perhaps employees' travel behaviour might not be easily influenced. Furthermore, Travel Plans Might not be high on employee's list due to the economic situation. However, the benefits of completing and operating a travel plan must be emphasised to existing businesses, not just for employees travelling to work, but also for their business fleet, especially where it can be demonstrated a different approach may offer cost savings.

- 10.2.5 A travel plan does not need to be limited to a single business or housing development. It can be written to account for multiple businesses or housing developments. Therefore, travel plans could be developed which cover different land uses within the town. For example a travel plan could be developed for any new residential developments or existing employment areas such as Buns Bank. All travel plans produced within Attleborough should be linked and aim to incorporate as many combined measures as possible.
- 10.2.6 Any future travel plans for Attleborough should encapsulate all aspects of transport, potential measures and future development within the town and town centre. They should meet with the correct NCC travel plan guidance and make direct reference to and incorporate the recommendations made as part of this document and other elements of work completed on smarter choices within Attleborough.
- 10.3 COORDINATION OF TRAVEL PLANS
- 10.3.1 A Travel Plan/Smarter Choices coordinator should be appointed for Attleborough and seek to work with the town council and businesses to adopt smarter choices and achieve the aims of any future travel plans. The main aim of the travel plan coordinator should be to provide a link between all travel plans within Attleborough. For example if a Car Share scheme is development the coordinator's role would be to inform users of the scheme but also to highlight car sharing doesn't need to be limited to fellow colleagues. A coordinator would also ensure the work completed on smarter choices and future travel plan measures would remain relevant and reactive to ensure the benefits of any work are realised.
- 10.3.2 Unfortunately Norfolk County Council³³ have disbanded their travel planning team (although have officers who can offer travel planning advice) so a funding stream to provide a dedicated coordinator would be required. There may be potential to develop a small team of travel planners to jointly deliver the Thetford and Attleborough travel plans, this would not only reduce costs but would provide a good pool of resources within the team. The joint approach might even allow the team to negotiate greater discounts or additional benefit if procuring products.

Figure 23 Extract from the Thetford Area Action Plan – Policy TH1 Achieving Modal Shift



³³ http://www.norfolk.gov.uk/Travel_and_transport/Travel_choices/Travel_plans/index.htm

- 10.3.3 In order to generate and maintain funding for a small team of travel planners and ensure a link between individual travel plans, the coordinator could help develop individual travel plan for existing and future developments within the town. Alternatively through the planning process, contributions could be sort from developers towards sustainable travel. The overall budget of such a team could vary substantially, currently travel plan coordinator roles (November 2012) attract salaries of a range between £25,000 - £30,000. Therefore, any funding stream would have to take account of both wages, on costs as well as a budget for initiatives.
- 10.3.4 Organisations such as Sustrans can and will provide help and support on smarter choices for any travel plans and any area wide travel plans would attract positive publicity for the town which may result in additional funding streams.

It is recommended that;

- Travel plans should be developed for both existing and future residential and employment areas within Attleborough which seek to provide a link between all aspects of transport and aim to develop a joint thinking approach to alternative modes of transport;
- Funding streams to facilitate the production of travel plans and Travel Plan/Smarter Choices coordinator are explored;
- The feasibility of providing a joint smarter choices team delivering both the Attleborough and Thetford Travel plans is explored; and
- Consideration is given to major developments in the Attleborough and Snetterton Heath Area requiring Travel Plans.

10.4 SCHOOL TRAVEL PLANS (STPs)

- 10.4.1 All the schools in the area have travel plans. However the date the travel plans were produced ranges from 2005 to 2007. Whilst there has been some monitoring (generally annually up to 2010) there have been no recent updates.
- 10.4.2 On speaking to the schools it seemed that travel plans had slipped down the priorities list with some schools indicating that since the Travel Plan team at NCC had been disbanded, there was little support.
- 10.4.3 Monitoring shows that at all the schools, car use was not the dominant mode for pupils in getting to school. Nevertheless, there is still scope for aiming to reduce car borne school run trips further as the town grows to aid traffic flow in the town, improve the health of pupils, benefit personal finances of parents or guardians as well as reduce transport related carbon emissions. Of particular note and relevance, the baseline work indicated that most pupils attending the Junior School lived within 2 miles. With regards to health, nationally, only 63% to 68% of year six were deemed to have a healthy weight.
- 10.4.4 One of the concerns expressed in responses to the School Travel Plans is that Attleborough is not safe to walk and cycle around and that improvements beyond the immediate school are beyond the control of the school. A walking and cycling network with interventions has now been identified and costed which when implemented will enable safe, coherent and attractive walking and cycling routes to school which will help make the travel plans successful. The schools form destinations on this network.
- 10.4.5 It is also important to note that the monitoring showed that the year after the Travel Plan, car use in general fell again showing that travel plans for schools can work and have benefits.
- 10.4.6 It is therefore recommended that School Travel Plans once again become a Council and School priority. The benefits should be relayed to the Head Teacher with the aim of undertaking travel plans. The Travel Plan should aim for modal shift from car use by staff as well as pupils.
- 10.4.7 A steering group of parents, older pupils, teachers and representatives of all tiers of local government should be set up. Involvement of the steering group will be essential for the success of the Travel Plan which needs to be child-centred and builds on small steps to gradually change travel behaviour.

- 10.4.8 Travel to school surveys are the first step. These could be completed electronically either at school or at home in order to save time and effort in analysis. A healthy prize is an attractive incentive for completing surveys. The local cycle shop could be approached and Councils could also donate prizes for example.
- 10.4.9 An expert (potentially the Smarter Choices coordinator) should be employed to either assist the schools in writing the travel plans or, acknowledging that the member of staff allocated for this task might not have the relevant experience or knowledge or indeed ample time, the Officer or Consultant could lead on writing the Travel Plan. Note that this expert could also be involved in the other Travel Plans discussed in this section to share the costs.
- 10.4.10 There are also other resources which could be harnessed. Sustrans' School Travel team encourages children to walk and cycle to school through a range of practical and educational measures. They provide free information, templates and resources, including a variety of information sheets. A Bike It Officer (see section x) can help increase levels of cycling for example.
- 10.5 RESIDENTIAL TRAVEL PLANS (RTPs)
- 10.5.1 A residential travel plan is a package of measures designed to reduce car use originating from a new residential development by promoting alternative and sustainable forms of transport alongside reducing the need to travel in the first place.
- 10.5.2 According to Norfolk County Council³⁴ Residential Travel Plans are for large residential developments featuring plans for sustainable development including a remit to co-locate facilities and provide excellent sustainable transport links. These plans will also feature a package of measures aimed at influencing the travel behaviour of new home owners through the provision of up to date travel packs, personalised journey planning and season tickets for public transport. Ambitious modal shift targets will be required for new residential developments where the potential for modal shift is greater than already established developments. In Norfolk, they are asked for in relation to housing developments over 100 dwellings or if proposals will have a significant effect on the highway.
- 10.5.3 RTPs differ from some other types of travel plan, in that their preparation generally takes place in advance of site occupation and without full knowledge of the travel needs and characteristics of the future residents.
- 10.5.4 Benefits to residents include reduced travel costs for residents and less pollution and the promotion of a healthier lifestyle.
- 10.5.5 Benefits to developers include
- Achieves more attractive environments that contribute to regeneration and renewal initiatives
 - Creates good PR and can erode local resistance to schemes
 - Improves marketability with an added value product
 - Can influence the overall layout and approach
 - Parking, access and public transport are all considered together.
- 10.5.6 As discussed at section x, there could be merit in requiring travel plans at a certain threshold relating to number of dwellings or employment floorspace. Whilst major development (10 dwellings) could be too few to benefit from a residential travel plan, perhaps a threshold of less than 100, as is currently the situation in Norfolk, could benefit the traffic flow in the town.
- 10.5.7 Whilst there is Travel Plan guidance on Norfolk County Council's website³⁵, it is suggested that specific Residential Travel Plan Guidance could be of benefit.

³⁴ When is a Travel Plan required? <http://www.norfolk.gov.uk/view/NCC056235>

³⁵ [http://www.norfolk.gov.uk/Travel and transport/Travel choices/Travel plans/index.htm](http://www.norfolk.gov.uk/Travel%20and%20transport/Travel%20choices/Travel%20plans/index.htm)

Case Study Box x: Residential Travel Planning in London³⁶**Checklist 2: Principles****Residential travel plans – key principles**

- ✓ The plan should be site specific – the detailed choice of measures is guided by opportunities and constraints of the site, for example, existing public transport and facilities.
- ✓ It should combine 'hard' measures – site design, infrastructure and new services – with 'soft' measures – marketing, promotion and awareness-raising among residents.
- ✓ It should provide a holistic package with measures integrated into the design, marketing and occupation of the site rather than 'retrofitted' when the development is complete. The measures should aim to achieve more sustainable travel patterns from the outset, rather than cutting car use once the residents are in occupation.
- ✓ It should include measures to support walking, cycling, deliveries and public transport use.
- ✓ It should include parking restraint – likely to be critical to the success of the plan in reducing car use. A travel plan should never be treated as justification for more generous parking, as the parking level is itself an important measure in the plan.

10.5.8 The following case study boxes relate to Residential Travel Plans in Plymouth and in Broadland.

Case Study Box x: Cobham Field, Plymouth³⁷.

Cobham Field consists of 72 properties, offering a mix of 2, 3 and 4 bedroom homes.

The Residential Travel Plan was secured through Section 106 agreement.

The main output from the RTP was contributions to bus passes as well as a Smarter Choices website.



³⁶ Guidance for Residential Travel Planning in London (March 2008) <http://theihe.org/knowledge-network/uploads/Guidance-residential-travel-planning-2008.pdf>

³⁷ <http://www.cobhamfieldtravelinformation.co.uk/>

Case Study Box x: LAND OFF SIR WILLIAM'S LANE, AYLSHAM. Residential Travel Plan³⁸

Using this initial version of the RTP as a framework, an appointed Travel Plan Co-ordinator (TPC) will implement and regularly explore the potential for a variety of sustainable travel options and promote a culture for the development that encourages and celebrates the uptake of more sustainable modes of travel.

The Welcome Packs are intended to give a “kick start” to positively influence residents’ sustainable travel habits from the outset. They will also include the means for residents to use local bus services at a reduced rate for an initial period. The Welcome Packs will contain:

- a map of footway and cycleways in the area with routes to local destinations (including the route to along the rail path - Marriott's Way and Bure Valley Walk) highlighted;
- promotional information for local cycle shop(s);
- one voucher per household for the purchase of a cycle or cycle equipment up to the value of £100;
- one free high-visibility cycling tabard per household (upon request to the TPC);
- up to date bus timetables for principal bus services from Aylsham Town centre;
- up to date rail timetables for services departing Aylsham Station on the Bure Valley Railway;
- information on obtaining free membership of an on-site Car Club;
- vouchers for a free for a single operator one month unlimited travel adult bus season ticket between Aylsham and Norwich will be offered; one per dwelling (or alternatives to the same value on request, including details of how to obtain them);
- free membership of the Commonwheels Car Club will be offered to all residents;
- details of local supermarkets offering deliveries (including Tesco);
- TPC contact details;
- “Customer” feedback forms for residents to complete regarding the implementation of the RTP;
- A three month voucher for an Internet Service Provider connection on signing up to an annual work from home agreement with the TPC);
- a list of useful web-site links for public transport, cycling and walking.

First occupants of each dwelling will be eligible for one months free bus travel between Aylsham and Norwich on application to the TPC

The TPC will, if sufficient demand exists, arrange a walking bus to the local primary school to be supervised on a voluntary basis by parents.

The TPC will also seek to obtain preferential rates for new cycle purchases, servicing and cycle spares at local cycle shops, including Aylsham Cycle Centre

A three month voucher for an Internet Service Provider connection would be available to residents on signing up to an annual work from home agreement with the TPC.

Twice annually, the TPC will prepare and issue a RTP newsletter both electronically and in hard copy with an area specifically allocated for resident issues.

The TPC will also hold meetings twice annually where the ongoing implementation of the RTP will be discussed.

It is proposed to extend the Commonwheels Car Club into the site through the Developer funding a Commonwheels vehicle that would be located at a dedicated parking bay within the development

³⁸ Land off Sir William's Lane, Aylsham, Residential Travel Plan – Revision. Create Consulting, 2011.

10.6 RAIL STATION TRAVEL PLANS

- 10.6.1 The basic aim of Station Travel Plans (STPs) is to improve access to and from rail stations. STPs typically tend to look at bus-rail integration, cycle facilities as well as pedestrian routes and car parking. A Station Travel Plan can also bring together all the stakeholders with an interest in rail stations (rail industry, local authorities, passenger groups, bus and taxi operators, cyclists and others) to develop and agree common objectives and a coordinated approach to delivering them.
- 10.6.2 One of the aims of the Smarter Choices Study is to increase mode share of Smarter Modes. Norwich is a key attractor for leisure and work trips. Rail can play a key role in enabling people to access Norwich and Cambridge.
- 10.6.3 In order to make a journey by rail another mode of transport has to be used to access the rail station. If more people use the train, the key question is how will they access the station?
- 10.6.4 It is essential that passengers are encouraged to access the station using more sustainable modes where possible. Applying the travel plan process to a rail station offers the opportunity to look at all travel modes and how they interact with one another. The process of developing a travel plan helps to identify barriers affecting travel choices and highlights what works well already in addition to areas for improvement.
- 10.6.5 The 2007 Rail White Paper required the DfT to introduce Transport Plans and Station Travel Plans in which local businesses, including station operators, agree access plans for the extra demand that their activities generate. The White Paper required the rail industry to undertake pilot exercises with the objective of reducing CO2 emissions, achieving a modal shift from the car and encouraging more people to use rail. One of the pilot schemes that is similar to Attleborough is Hebden Bridge which is discussed in the following case study box.

Case study box x: Hebden Bridge pilot³⁹

Hebden Bridge is the local centre for the rural hinterland and the station is a key transport hub with a number of local bus services interchanging at the rail station. The station is situated around half-a-mile from the town centre and is primarily used for park and ride by commuters as an origin station.

A stakeholder group was established made up of Metro, (who have taken the lead on the development of the plan) Northern Rail, Network Rail, Calderdale Council and Hebden Royd Town Council.

The process of putting the plan together has been a new challenge involving looking at all aspects affecting travel modes and routes to and from the station in the surrounding environment. The approach taken to develop the plan has included:

- Analysis of survey data
- Carrying out a site audit to establish the existing situation
- Development of accessibility maps to show how the station is accessible by sustainable modes within time bands
- Establishing Steering Group of key stakeholders

Action Plan highlights

- Marketing of existing bus & rail services and walking & cycling routes — Enhance promotion of what's already available.
- Improve lighting on the station approach road and in the car park — Beneficial to all station users improving safety and security of the station environment.
- Improve signage on walking routes to and from the station — Enhanced signage provision on all pedestrian routes will improve walking experience.
- Provide customer information screens on station platforms and in the bus interchange.
- The addition of up-to-the-minute service information will help users make journey choices.
- Improve walking routes to the station — Where necessary introducing dropped kerbs and footpath resurfacing.

³⁹ Source: Association of Train Operating Companies (ATOC)

Key lessons learned

One of the biggest obstacles for any travel plan is the issue of funding. ATOC, RSSB and Passenger Focus have funded survey work at each pilot station and costs involved in the management of the 24 station pilot programme. No other funding has been identified from Department for Transport specifically for improvements associated with the emerging action plans.

- 10.6.6 Assessment of the STP pilots concluded that there is good evidence of increased cycling at 12 stations, significantly increased bus patronage at three stations, strong evidence for growth in walking at two stations and increased uptake of PlusBus at 10 stations promoting it.
- 10.6.7 The experience of the pilot programme shows that the Station Travel Plan approach is most likely to deliver benefits where at least some of the following conditions apply (inter alia) at stations where major developments at or near the station are planned, where major local transport schemes are proposed and s where a funding opportunity arises, for example a Section 106 contribution from a nearby development. Other tips and lessons learned include the following:
- i It is essential that local stakeholders are involved in the delivery of the Travel Plan as a whole in order to ensure successful delivery of the key objectives.
 - ii It is recommended that the funding contributions and resource capacity of key partners is identified at a very early stage which will steer the development of objectives, measures and targets.
 - iii Establishing a small project team to meet regularly to move the project forward and take key decisions will work well.
 - iv Setting up a schedule of meetings from the inception to launch of the Travel Plan will help secure commitment to regular meetings and develop relationships between partners.
 - v From the outset a clear vision that is agreed by the clients or main sponsors of the STP needs to be established.
 - vi It is important to manage public engagement, so as to generate positive discussion and ideas whilst being careful to manage expectations.
 - vii Engage with special interest groups, in particular disabled rail passengers.
 - viii There is potential for a single issue (in the case of Darlington, gating of the Station) to dominate debate.
 - ix Ensure that the travel plan delivery timescales are aligned with wider major proposals.
 - x Nature of the conservation area status could be an added complexity in terms of delivering some of the actions. For example, location and type of signage to be used on key approaches and bus stops.
 - xi Political support at local authority level is important.
 - xii Local knowledge is vital
 - xiii Whilst the willingness to deliver Station Travel Plan schemes is there, sometimes the time to do it is not.
 - xiv It was important to find the right language for different partners.
 - xv A project leader is essential
 - xvi Realisation from Officers of the implications of promoting a Station Travel Plan and the likely financial commitments this brings with it, in times of probable financial cutbacks on transport spending
 - xvii It is Difficult to achieve a survey sample of around 30% which is often accepted as a representative group. The best efforts at some rail stations have resulted 2-3%. It is therefore impossible to get a representative group. As such, this is not a reliable way of setting baselines or targets or evaluation. However, given its size, advice from ATOC is that smaller surveys would be acceptable for Attleborough. There is the potential to use season ticket data, focus groups, site audit (most influential source of information) as well as National Survey data.
 - xviii Site audit - Update site audit periodically and include counts of cars parked.
 - xix Car parking and cycle parking counts are a robust indicator.

- 10.6.8 Attleborough Train Station is an origin station. The town is set to grow and whilst some employment areas and more facilities will be provided locally, the town will continue to look to Norwich in particular for higher order services and also for employment to some extent. Rail could become more popular for business and leisure journeys. With the Station located on a main route into the town centre, with limited parking there appears a potential need for a Station Travel Plan.
- 10.6.9 With the Station forming a destination on the Walking and Cycling network, the topography and compact nature of the town now being conducive to walking and cycling as well as the station being on a main road into the town thus having buses passing by now and in the future, such a Travel Plan has the potential to be successful. It is therefore recommended that a Station Travel Plan be produced for Attleborough Railway Station.
- 10.6.10 STPs are undertaken in a partnership which in Attleborough's case could be between Norfolk County Council, Attleborough Town Council, Breckland District Council and Greater Anglia (as owner of the station).
- 10.6.11 Attleborough is a relatively small station and as such the cost of producing a STP is likely to be £10,000 to £13,000. The following are lessons learned from the Pilot Schemes (source: ATOC). Attleborough's STP can benefit from this advice, although revised guidance is due from ATOC early in 2013.
- 10.6.12 It is also worth noting that some of the recommendations of the Smarter Choices work will inform the STP. In particular the proposals for car parking at or near the station, the proposals for improved cycle parking, the proposed bus route changes as well as the station being on the walking and cycling network. A STP would bring this work together and the partnership approach will aid delivery. There could also be merits in addressing other stations in the area, perhaps those along the Norwich to Cambridge line with the benefits of economies of scale.
- 10.7 PERSONALISED TRAVEL PLANS
- 10.7.1 Personalised Travel Planning involves specific travel advice for a particular individual. It is suited to their particular needs and their particular journey. It is likely to form part of an employment based travel plan as well as a residential travel plan.
- 10.7.2 The following case study box highlights two different approaches; the first being web based and the individual receives an email with detail for their specific journey and the second being more of a face to face approach.

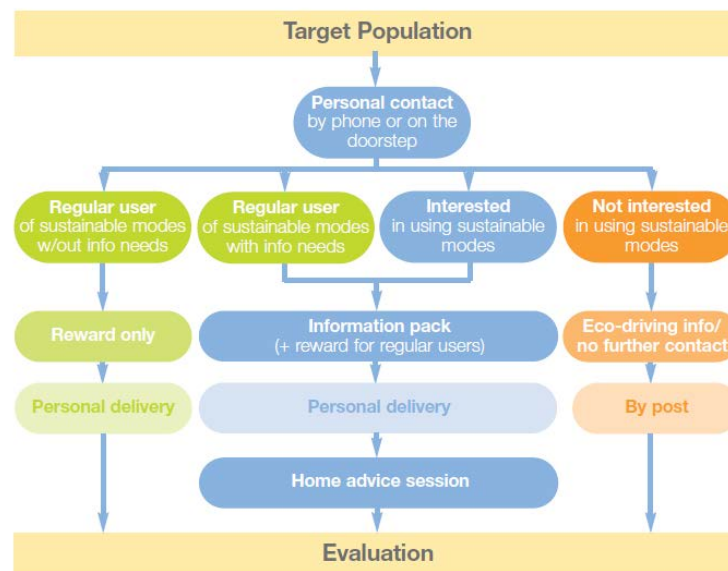
Case Study Box x: MyPTP (information provided by Liftshare)

- A web based tool operated by liftshare.co.uk
- Integrates all modes of travel
- Help inform: individuals about all travel options available, organisations of their staff travel patterns, and transport providers so they can begin to match supply with demand.
- Be delivered to individuals on a 1-2-1 basis or via a bulk upload facility which automatically generates personalised travel plans for a large number of individuals
- Achieve modal shift. Pilot of the tool showed 21% of users had either changed their travel habits or were considering changing as a result of receiving their myPTP.
- Pricing information: myPTP is available on a credit based system. This allows the organisation to purchase a number of credits depending on demand (~£5/credit). Each travel plan delivered = 1 travel plan credit. These credits can be used at any time within 3 years of purchase.



Case Study Box x: Travel Smart (Information obtained from Sustrans website)

- Operated by Sustrans.
- Gives people the tailor-made information and support they need to choose to walk, cycle and use public transport more often.
- The cost and length of project varies depending on the setting, size of the target population, contact rate required, evaluation method requested and additional engagement activities included in the project. Sustrans train and employ local canvassers and members of staff from central or regional team would manage the field office and act as Project Manager. Councils will be involved in the project planning (to ensure the required objectives are met) and there will be regular progress meetings throughout the lifetime of the project.
- Starts with personal contact, either by phone or on the doorstep, with households in the project area.
- Based on the initial conversation with them, households are segmented into three main groups: regular users of sustainable travel modes; non-regular users who are interested in finding out about sustainable travel; and those who are not interested in taking part.
- Most of the campaign focuses on the 'interested' group. These households receive an order form from which they can choose the materials and services that meet their transport needs. These include walking and cycling maps, bus and train timetables, guides, active travel advice and discount cards for local bike and outdoor shops.
- Success is evaluated through detailed travel behaviour surveys conducted before and after the campaign.
- In Lowestoft, between 2008 and 2010 25,000 people were targeted. This saw a decrease of 13% in car use with an increase of 22% use of walking, cycling and public transport.
- In Broxbourne, between 2010 and 2011, 8,000 people were targeted. There was a 10% decrease in car usage followed by a 19% increase in other modes.
- The assessment of the scheme shows that for every £1 put in, £7.60 is saved.



10.8 CONCLUSION

10.8.1 Travel Plans can bring together all the elements of Smarter Travel that are discussed in this report. They can relate to various types of journeys, although the main use is related to schools and journey to work.

10.8.2 As Attleborough and Snetterton Heath changes and grows, Travel Plans can offer the mechanism to attain modal shift for most, if not all, journey types.

Key recommendations:

- Consider setting thresholds for requiring Travel Plans.
- Produce specific guidance for all types of Travel Plans
- Refresh the school travel plans
- Retrofit employment area wide travel plans, which also includes focus on the specific businesses therein. Promote my PTP as part of the travel plan.
- Produce station travel plans. Potential to produce for Thetford as well. Consider economies of scale for all stations along the Norwich to Ely line.

11. Getting the Message Across

11.1 INTRODUCTION

11.1.1 The most important aspect of any Smarter Choices work is the promotion of both the concept of smarter choices but also information about smarter choices available. It is imperative that any work completed to facilitate smarter choices and offer improvements is marketed to ensure potential users know of any improvements.

11.2 MARKETING

11.2.1 Various media could be used within the town centre to get the message across to local residents and businesses. The one controlling factor will be the budget available to fund any marketing strategy. Popular media may include;

- Local news papers
- Town news letter
- Radio
- Signage around the town
- Town Centre Information Boards
- Pub Notice Boards
- Websites
- Town Council Discussions
- Train Station Information Boards
- Travel plans (Home Information Packs)
- Websites
- Social media: Facebook, Twitter, LinkedIn.



11.2.2 Attleborough's size and close community would ensure that any promotion of improvements to encourage smarter choices would be a topic of discussion and help to spread the message.

11.2.3 As part of the travel plan/Smarter Choices coordinator's role, discussion throughout the town with local businesses and residences would form the core element of spreading the message of smarter choices.

11.2.4 Any public consultation exercises promoting future development within the town should be encouraged to include information on smarter choices and the potential improvements the developments may provide.

11.2.5 Existing work already completed by the former Norfolk County Council Travel Plan team in the schools within Attleborough should be resurrected as this will change the perception of children and parents alike and have a positive impact. Informing children at an early age is essential to being successful in changing people's perceptions in future years.

11.2.6 The adoption of a slogan for the town centre emphasising trips made by alternative modes of travel are a smarter choice may also provide a good way of promoting a greener town centre. Alternatively a competition open to all residents of Attleborough could be used to generate both a slogan for smarter choices and positive publicity throughout the town and local area. By including residents within the process it would increase the feeling of ownership and idea of doing something for the town.

11.3 TIMESCALES

- 11.3.1 Changing people's attitudes towards travel behaviours is not a task which rewards instant results. Certain elements of the community and businesses already travel smarter, some choose to travel smarter less regularly and others would not change their behaviours at all. Therefore, it must be understood that any work should be targeted over a long time scale and so work must be continuous over such periods.
- 11.3.2 Ideally any initial successes should be celebrated and then evaluated to identify how they can be improved upon and aim to secure the appropriate funding to continue delivering successes.

11.4 LESSONS LEARNED FROM ELSEWHERE

- 11.4.1 An important part of achieving success in promoting and encouraging smarter choices is learning from other schemes implemented elsewhere. Identification of both successes and failures enable improvements to future schemes. Other towns which have followed a sustainable approach should be consulted prior to adopting an overall strategy. Large scale employment areas or large organisations that have adopted a travel plan and actively implement its measures would provide a useful source of information, examples of which could be a large scale airport or the recent Media City development in Salford Manchester.
- 11.4.2 Information is readily available on the internet detailing both guidance and examples throughout the UK.
- 11.4.3 The best documented example of the effects of smarter choices is taken from work completed in three towns within north and middle England; Darlington, Peterborough and Worcester. All three towns won a central government funded scheme to become "Sustainable Travel Towns" and implemented a full package of measures encouraging smarter choices. A full analysis of the scheme and results is detailed on the DfT website⁴⁰ including details of lessons learnt and associated costs of the project.

Case Study Box x: Sustainable Travel Towns¹⁹

Towns: Darlington, Peterborough and Worcester

Budget: £15m for all three towns

Measures Implemented: personal travel planning, travel awareness campaigns, promoting walking and cycling, public transport marketing and workplace/school place travel plans

Staff: 6 -10 in each town

Successes: Car driver trips by residents fell 9% per person

Car driver distance fell by 5%-7%

On street traffic fell by 2% across the whole urban area, 8% within the inner core

Bus trips per person grew substantially by 10%-20%

Cycle trips per head grew by 26% - 30%

Walking trips per head increased by 10%-13%

Largest Expense: Personal travel planning (varied between a third and half the budget)

Conclusions of Study: The report presents sufficient evidence to support a justification in substantial expansion of Smarter Choice programs.

⁴⁰ <http://assets.dft.gov.uk/publications/the-effects-of-smarter-choice-programmes-in-the-sustainable-travel-towns-summary-report/summaryreport.pdf>

- 11.4.4 Such examples must be used to inform the development of measures within Attleborough with care taken to appreciate differences in geography and demography. For example the Sustainable Travel Towns study details a cost of £11 per head at 2009 prices. However, due to the lower population of Attleborough the cost per head may be higher. Such points are an important part in evaluating potential measures and the future coordination of the area wide travel plan.
- 11.4.5 Other well documented examples of individual measures also exist such as Edge Hill; a University in the northwest of England who after adopting a car sharing scheme implemented a guaranteed lift home policy in case of emergencies following an unsuccessful take up rate initially. If implementing a similar idea for a business within the town centre as part of a travel plan, it might be wise to adopt a similar approach.
- 11.4.6 Similarly measures implemented within the Town Centre should be publically documented and reviewed to avoid redundant ideas or measures. This approach would ensure getting the measure across about smarter choices would enjoy the best chance of success, and provide a valuable resource for future years.
- 11.5 CONCLUSION
- 11.5.1 Key to ensuring the success of the uptake of smarter choices is getting the message across to the potential users. No one measure fits all and so a package of measures must be provide to ensure a person can tailor their choices to suit their life styles and needs. However, it is important that everyone knows smarter choices exists and that the town is committed to ensuring their success. A flexible approach which is specific to the business and residents of the town centre would provide the best chance of success in reducing journeys by cars.

Key recommendations:

- A strong marketing campaign is produced to promote Smarter Choices in the Attleborough area.
- Various types of media are employed to get the message across.
- Lessons from elsewhere influence the campaign for the area

12. Delivery, Implementation and Monitoring

12.1 INTRODUCTION

- 12.1.1 The Smarter Choices report covers all aspects of the mode hierarchy, as set out at section x. The study recommends certain actions with the ultimate aim of attaining modal shift away from single occupancy car use to more sustainable modes of transport. The recommendations range from hard infrastructure required to implement the walking and cycling network, to promoting various campaigns such as 'walk to work week'.
- 12.1.2 In the current economic climate, realistic and deliverable schemes are essential. Each section of the report brings out the key recommendations relating to that particular Smarter Travel Choice. Clearly there will be other actions that can bring about change and as such, the recommendations should not be seen as exhaustive. The key recommendations, whilst requiring time and resources, are schemes which are attainable and deliverable.
- 12.1.3 Relating to the success of the Smarter Choices programme, it is likely that there will be some sections of the local community who already travel smarter; others who do sometimes and could do so more often; another section who currently do not travel smarter but may start, maybe as a result of fuel costs; and another section of the community who will not change their travel behaviour.
- 12.1.4 This section brings together the key recommendations, identifies ways of delivering the schemes as well as potential responsible bodies. For monitoring purposes, it also suggests a headline indicator.

12.2 ECONOMIES OF SCALE

- 12.2.1 It is not always the case that the schemes identified need to operate in isolation. The report identifies areas of potential efficiency savings through collaborative working.
- 12.2.2 The Thetford Area Action Plan, for example, identifies a need for a Smarter Travel Thetford Team. This team would be formed to promote modal shift for Thetford. This report identifies at section x the importance of dedicated resource to promote modal shift in Attleborough. It is recommended that a Smarter Travel/Choices Team for Attleborough, Snetterton Heath and Thetford be formed. The cost will be shared between the two large growth areas in the District and there could be potential to negotiate greater discounts for example.
- 12.2.3 With regards to Station Travel Plans, for the same reasons as stated above, there could be merits in commissioning the production of Station Travel Plans for all stations in the District, or perhaps all stations between Norwich and Ely.
- 12.2.4 In order to attain a greater chance of car sharing matches for example, retrofitting travel plans to a business area, such as Bunn's Bank, rather than to specific businesses, could result in greater modal shift and save costs to individual businesses.
- 12.2.5 It is therefore recommended, that where practicable, collaboration in delivering schemes be investigated.

12.3 LIMITED REALISTIC INTERVENTIONS

- 12.3.1 It may seem that in some areas of the report, limited interventions or recommendations are proposed. Whilst more could be done, as discussed previously in this section, deliverability may not be realistic in the current economic climate.

12.3.2 Taking the radial roads into the town centre as an example, due to the existing width of the highway and footways which are fronted by private gardens and properties, there is limited scope in providing improved provision for cyclists, perhaps using cycle lanes or shared use paths, without the need for private land or local departures from the guidance. Neither are easy solutions and both could be undeliverable due to the need to secure third party land.

12.4 LOCKING IN THE BENEFITS OF SMARTER CHOICES

12.4.1 It is essential that the Smarter Choices Strategy maintains its effectiveness over time and that the benefits to encourage modal shift are locked in⁴¹. The potential increased capacity resulting from modal shift could tempt people back into the car seeing users revert to previous travel behaviour over time. The Strategy, once started, is likely to be ongoing. Ways to 'lock in' the benefits include re-allocation of road capacity; parking control; traffic calming; pedestrianisation; cycle networks; improved public transport service levels; congestion charging or other traffic restraint; and other use of transport prices and fares, speed regulation and enforcement.

12.5 QUICK WINS

12.5.1 There are likely to be benefits of starting Smarter Choices work sooner rather than later, and ahead of large scale change. By doing so:

- there are the beginnings of a Smarter Travel culture in the town for the development to add to;
- there could be more capacity to accommodate any growth-related traffic; and,
- the existing population's finances and health could benefit.

12.6 FUNDING AND DELIVERY

12.6.1 The following table summarises the key recommendations from each of the preceding sections. It recommends a time scale, cost and responsible body. The timescales included are defined as Short term: 0 - 5 years, Medium Term: 5 – 10 years and Long term: 10 years plus.

⁴¹ The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Research Report. Report to the Department for Transport. Sloman et al, March 2010. <http://assets.dft.gov.uk/publications/pgr-sustainable-smarterchoices-programmes-pdf/chap1.pdf>.

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
Set up a Smarter Choices Team. <ul style="list-style-type: none"> A strong marketing campaign to promote Smarter Choices in the Attleborough area. Apply lessons learnt from elsewhere. Could promote all schemes suggested in this report. Could provide assistance in producing new and retrofitting Travel Plans. Promote walking and cycling events Considerate road user campaign 	Short term and ongoing	Typical cost for: <ul style="list-style-type: none"> Manager is £35 - 40,000 p.a. Travel Planner is £25 - 30,000 p.a. Administrative Assistant is £15 - 20,000 p.a. On costs excluded. Office would be required – annual cost. An annual budget would be required – perhaps £100,000 initially. It is suggested this is budgeted for a minimum of 3 years.	Combine with Thetford equivalent. Planning Application and Planning Obligations.	NCC BDC Town Council	% walking, cycling, bus, train, working from home. Frequency and journey type (school, business, leisure). Bespoke surveys and traffic counts.
Promote tele and video conferencing to businesses.	Short term and ongoing.	Promotion: Officer time. Facilities: Depends on level of technology. £10 to £300,000.	New or retrofit Travel Plans REVACTIVE programme Yes to Broadband	NCC BDC Smarter Choices Team	% businesses using tele and vid conferencing. Bespoke surveys.
Promote working from home to businesses and residents.	Short term and ongoing.	Promotion: Officer time. Facilities: depends if employee has own pc or laptop and depends on type of work as to whether something like Citrix required.	New or retrofit Travel Plans REVACTIVE programme Yes to Broadband	NCC BDC Smarter Choices Team	% businesses promoting working from home.
Promote Sainsbury grocery delivery scheme.	Short term and ongoing.	Liaison with Sainsbury: Officer time	Resident Travel Plan	Town Council BDC Smarter Choices Team	Numbers using delivery scheme – data provided by organisation.
Continue support for super fast Broadband with lobbying to ensure Attleborough is considered early on.	Short term.	Already commissioned. Officer time to promote Attleborough.	Yes to Broadband	NCC BDC	Progress on roll out of superfast Broadband – data provided by BT.
Consider making the town centre a wi-fi hot spot.	Medium term.	£5,000	Businesses/Retailers work together.	Potential for Town Council to have coordinating role.	Progress on roll out across town – data provided by individual businesses.
Promote flexible working to businesses.	Short term and ongoing.	Promotion: Officer time.	New or retrofit Travel Plans REVACTIVE	NCC BDC Smarter Choices	% businesses operating flexible working - data

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
				Team	provided by individual businesses.
Deliver the walking and cycling network for the town, including the cycle parking and crossing improvements/provision.	Short term and ongoing	Priced at Appendix X.	Individual schemes Planning Applications Cycle-Rail Toolkit	BDC NCC Smarter Choices	Progress on delivery of networks. Number of schemes implemented.
Deliver cycling routes to Snetterton Heath and Bunn's Bank in the first instance.	Short to medium term, when employment is intensified in these locations.	Priced at Appendix X.	Individual schemes Planning Applications	Team NHS Norfolk ATOC	
De-cluttering of the streetscape.	Short	Initially officer time. To remove unwanted clutter, likely to be £100 per item.	Town Centre scheme.	BDC NCC Town Council	Exercise completed.
Sheffield Stand cycle stands at: <ul style="list-style-type: none"> Lidl Railway Station Throughout the town centre At each business employing 10 or more staff around Attleborough and Snetterton Heath 	Short term Medium term Short to medium Short to medium	Priced at Appendix X.	Liaison with Lidl As part of franchise discussions. Part of town centre scheme. REACTIVE and travel plan retrofit.	BDC NCC Smarter Choices Team Network Rail TOC	Number of user friendly cycle stands in place.
Ensure new development is cycle friendly and link to the town cycle network in a coherent way.	In line with proposals.	Not priced as integral to a particular scheme.	Planning Applications	BDC NCC	Progress on delivery of networks. Feedback from users. Bespoke survey.
Promote buses	Short term	Officer Time	Travel Plans	NCC BDC Smarter Choices Team Bus Operators	Usage of buses. Feedback from users. Company data.
Gold, Silver and Bronze stops	Short term and ongoing.	For existing town: audit of bus stops would cost £350 per day. Scale of intervention would vary depending on audit. For new development, not priced as integral to a particular scheme.	Stand alone audit for existing town. Planning applications.	NCC BDC Smarter Choices Team Bus Operators	Progress on delivery of bus stops.

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
Potential amendments to existing services	Short term	Not costed as would be delivered by private businesses if there is a business case. If Councils deemed interventions a priority, could need subsidy, but this would be a result of negotiations with operator.	Part of ongoing liaison with bus companies. Business case required if services amended or changed.	NCC Bus operators	Usage of buses. Feedback from users. Company data.
Provision of new services to link in the Urban Extension and Snetterton Heath	Early in planning application process	Per bus, potentially £110,000.	Planning Application	NCC Bus Operators Developers	Usage of buses. Feedback from users. Company data.
Feasibility of an improved bus interchange	In line with provision of new services	Study initially: £10-15,000.	Planning Applications. Town Centre Scheme.	NCC BDC Bus Operators	Delivery of bus interchange. Usage of buses. Feedback from users. Company data.
Improvements to Eccles Road Railway Station: <ul style="list-style-type: none"> demarcate pedestrian area where there is no footway; provide step-free access to platforms; review shelter provision; provide cycle storage. 	At a timely manner if station use has potential to increase	£5,000 £25,000 £25,000 to £30,000 £6,000	As part of franchise discussions. High Level Output Specification and Statement of Funds Available. East Anglia Rail Prospectus.	Network Rail TOC	Progress on delivery of improvements. Feedback from users. Passenger Studies.
Improvements to Attleborough Station: <ul style="list-style-type: none"> review access provision in conjunction with level crossing replacement and provide improved footway to Cambridge platform; investigate the possibility of returning the former station buildings in to use for waiting area; Improve parking provision 	Short term	£5,000 to £10,000 Building condition survey required. £100,000 to £130,000	As part of franchise discussions. Draft Norfolk Rail Prospectus High Level Output Specification and Statement of Funds Available. East Anglia Rail Prospectus.	Network Rail TOC NCC BDC	
Review demand forecasts as proposals for development are confirmed & consider if this requires an increase in capacity of existing services either through lengthening trains or increasing	Medium term	Officer time.	As part of franchise discussions. Draft Norfolk Rail Prospectus	Network Rail TOC NCC BDC	As and when any changes occur, assess usage levels. Organisation data.

CAPITA SYMONDS

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
frequency.			High Level Output Specification and Statement of Funds Available. East Anglia Rail Prospectus.		
Encourage greater use of freight facility through identification of potential new users and publication of capabilities and assistance available	Short to medium term	Officer time.	Mode Shift Revenue Support. Growth at Snetterton Heath Employment Area. Draft Norfolk Rail Prospectus East Anglia Rail Prospectus.	Network Rail BDC NCC Richard Johnstone Logistics.	Number of trains using freight interchange. Company data.
Potential for transshipment hub (to be reviewed once it is clear if HGVs will be banned from the centre of Attleborough or other towns in the area).	Short to medium term	Officer time	Opportunities from Growth at Snetterton Heath Employment Area. Panning obligations. Town Centre and Link Road schemes (potential HGV ban).	NCC BDC South Norfolk Council	Usage of transshipment hub. Company data.
Promote Car Sharing.	Short term	Officer time. Promotion budget. Assume £5,000	Local business New or retrofit Travel Plans	NCC BDC Liftshare Smarter Choices Team	Level of car sharing. Registrations for use of website. Bespoke survey and company data.
Priority parking spaces for car sharers within the main car parks within the town	Short term	Officer time. Signing and lining.	BDC car park review. Town Centre scheme.	NCC BDC	Provision of spaces and use of spaces. Company data.
Promote Car Plus re running car club in Attleborough (potential for a van and electric vehicles to be included).	Medium term	Officer time initially. Eventual costs would be car(s) and insurance.	Planning Applications Town Centre scheme	Car Plus Existing car clubs. BDC NCC	Provision of car club and usage data from company.
Fast or Rapid electric vehicle charging points should be installed in convenient locations such as the main Queens Square car park or Church Street. Priority parking spaces should be installed in the Queens Square car park for electric vehicles	In line with Town Centre Scheme.	£5,000 to £50,000 depending on specifications and proximity of electricity source as well as whether an on-board or off-board fast-charging system is used	BDC car park review. Town Centre Scheme. Plugged in Places	BDC NCC	Provision of spaces and use of spaces. Company data. Provision of charging points and use of points. Company

CAPITA SYMONDS

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
Liaison with local businesses and residents to inform them of the benefits of alternatively fuelled vehicles should be undertaken	Short term and ongoing.	Officer time initially. If buy vehicle, depends on make and model.	Plug-in Car Grant Plug-in Van Grant Plugged in Places	BDC NCC Smarter Choices Team	data. Use of charging points. Company data.
Local petrol stations should be approached about installing a rapid charging point	Short to medium term.	Officer time initially. Rapid charging point: £5,000 to £50,000 depending on specifications and proximity of electricity source as well as whether an on-board or off-board fast-charging system is used	Town Centre Scheme Plugged in Places	BDC NCC	Provision of charging points and use of points. Company data.
Makers of electric vehicles should be approached to provide demonstrations and information at school fairs or town centre gatherings to increase awareness of new technologies	Short to medium term.	Officer time.	School fairs Town centre gatherings Plugged in Places	Town Council BDC NCC Electric Vehicle Manufacturers	Number of demonstrations and feedback.
Local authority vehicles and buses operating in the Attleborough area should be requested to use ultra low sulphur diesel fuels.	Short to medium term	Officer time initially. If taken forward, cost of new vehicle fleet.	Green Bus Fund Bus Service Operators (potentially as replace buses) Grant	NCC Bus operators.	Number alternatively fuelled vehicles in the area.
Promote benefits of alternatively fuelled fleet to businesses.	Short term	Officer time initially. If taken forward, cost of new vehicle fleet.	REACTIVE Plug-in Van Grant	NCC BDC Businesses	
Promote efficient driving courses.	Short term	Cost of Officer time for delivering course. £70.50.	REACTIVE NCC Eco Safe Driving Course	NCC BDC	Number of drivers from the area taking course.
Consider setting development thresholds for requiring Travel Plans.	Short term	Officer time. Cost to relevant development proposals for Travel Plan production as well as ongoing implementation.	S106 agreements	NCC BDC Smarter Choices Team (assistance)	
Produce specific guidance for the different types of Travel Plans	Short Term	Officer time.	Stand alone project.	NCC BDC	Production of guidance. User feedback.
Refresh school travel plans	Short term	Officer time. Cost to schools to implement and monitor.	Stand along project.	NCC BDC Schools	Travel Plans produced. Monitoring associated

12 Delivery, Implementation and Monitoring

Key Recommendation	Delivery Timescale	Estimated Cost	Funding and Delivery Opportunities.	Potential Responsible Body	Headline Monitoring Indicator
		Budget to enable implementation.			with the Travel Plans.
Retrofit employment area wide travel plans, which also includes focus on the specific businesses therein.	Short term	Officer time. Costs to businesses to implement and monitor. Budget to enable implementation.	REACTIVE Cycle to Work Guarantee Motiv8 model	NCC BDC Businesses	Travel Plans produced. Monitoring associated with the Travel Plans.
Promote Personalised Travel Planning.	Short to medium term	Maximum £5 per head. Reduces if 'bulk buy'.	Part of all types of travel plans or stand alone project. Motiv8 model	Liftshare NCC BDC Businesses	Travel Plans produced. Monitoring associated with the Travel Plans.
Produce station travel plans. Consider economies of scale for all stations along the Norwich to Ely line.	Short to medium term	£10,000 to £13,000	Potential Station Travel Plan Pilot legacy. Part of Franchise discussions. Cycle Rail Toolkit. Draft Norfolk Rail Prospectus. East Anglia Rail Prospectus. Cycle Rail Working Group. High Level Output Specification and Statement of Funds Available.	Network Rail TOC Town Council NCC BDC ATOC	Travel Plans produced. Monitoring associated with the Travel Plans.

12.7

12.8 FUNDING AND DELIVERY OPPORTUNITIES

- 12.8.1 Set up a Smarter Choices Team. One of the key elements to Smarter Choices is a dedicated team to influence travel behaviour.
- 12.8.2 With both Thetford and the Attleborough area growing and changing and both benefitting from modal shift from single occupancy car use, a combined team to attain modal shift appears to be a sensible way forward. The costs of the team and related budget will be shared and there could be potential to negotiate discounts. Both stations could benefit from retrofitted business and station travel plans as well as improved walking and cycling networks.
- 12.8.3 The team would also have a monitoring function. See section [x](#).
- 12.8.4 There are examples of the type of roles the team could be made of:

Programme Manager, Smarter Choices, East Midlands

£25,649 - £29,143 per annum
(depending on relevant skills and experience)
37.5 hours per week – based in Nottingham (Ref: SUS777)

This exciting new role is to ensure effective delivery of all our behaviour change projects in our east midlands region and to promote their integration so that the strategic objectives of Sustrans in the area are achieved.

Project Officer, Schools (Bike It), East Sussex

£20,574 - £23,028 per annum
(dependent on relevant skills and experience)
37.5 hours per week – contract to 31 March 2015
two vacancies: based in Eastbourne or Lewes (ref: SUS768)

Bike It is a highly successful project aimed at increasing levels of cycling to school. The main responsibilities of this role will include the promotion of cycling to school at selected primary and secondary schools, supporting 'school champions' at other local schools and making links between schools and the bicycle industry.

Smarter Choices Co-ordinator, South Hampshire

£23,028 - £25,649 per annum (depending on relevant skills and experience)
37.5 hours per week – contract to 31 March 2015
Based in either Southampton, Eastleigh or Portsmouth
(Ref: SUS772)

This exciting new role is to assist the Programme Manager in managing the effective delivery of our smarter choices projects in Hampshire so that the strategic objectives of Sustrans in the area are achieved.

Project Officer, Workplaces (Bike It), East Sussex

£20,574 - £23,028 per annum
(dependent on relevant skills and experience)
37.5 hours per week – contract to 31 March 2015
based in Lewes or Eastbourne (ref: SUS752)

The exciting challenges of this role include the delivery of workplace sustainable travel initiatives which aim to increase the number of employees and visitors using sustainable travel modes, such as walking and cycling, through working with employers on a range of activities which support sustainable and active modes of travel.

Job Opportunity: Active Travel Officer



The City of Edinburgh Council is advertising for a candidate to work in a small team implementing their award-winning Active Travel Action Plan.

- Location: Waverley Court, Edinburgh
- Salary: £27,106 - £32,423
- Hours: 36
- Full Time Fixed term contract, 18 months
- Closing date for applications: 2 November 2012

The successful candidate will work a small team implementing the Council's award-winning Active Travel Action Plan - a focussed strategy aimed at increasing walking and cycling in Edinburgh. The job will have a particular focus on updating the Council's Street Design Guidance and on delivering walking-related actions from the ATAP. The following areas of experience/ knowledge/ interest are highly desirable:

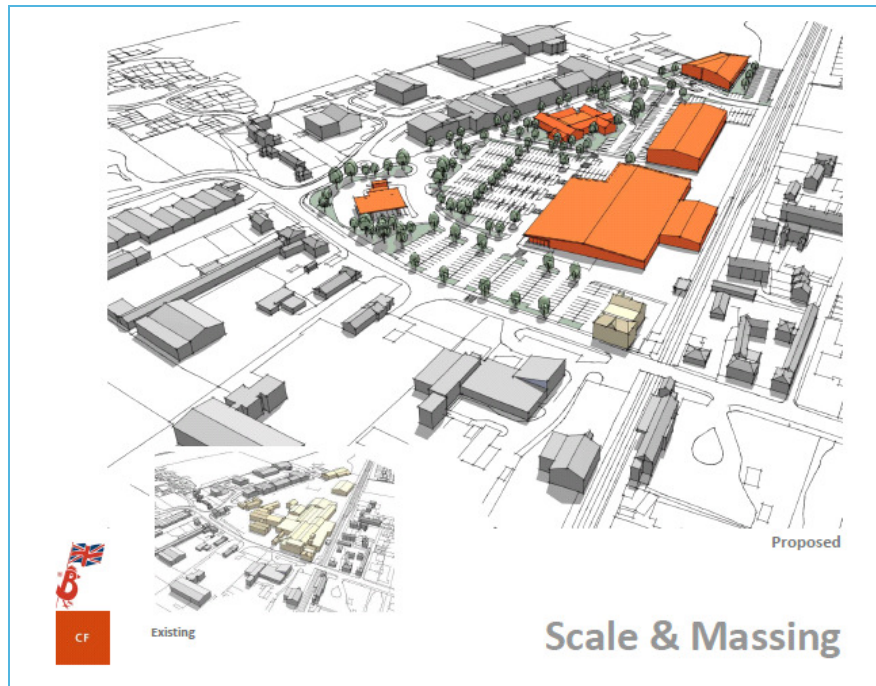
- Street/ traffic management design and preferably use of relevant computer design packages
- Good written and verbal communication skills
- Working to promote walking

- 12.8.5 **Healthy Town, Attleborough:** One of the aims of the Healthy Town initiative is to get people to move more. Moving to other parts of the County, and specifically Attleborough, could provide a great opportunity to promote Active Travel.



- 12.8.6 **Cycle to Work Guarantee:** The Cycle to Work Guarantee is a voluntary initiative from the Department for Transport, challenging businesses to become cycle friendly employers by making it easier for staff to cycle to and from work. There are five elements:
- Storing: Providing secure, safe and accessible bike parking
 - Changing: Providing good quality changing and locker facilities
 - Buying: Offset the cost of cycling equipment and save on tax by introducing the cycle2work scheme
 - Repairing: Helping with repair for cycles on or near site
 - Inspiring: Introducing training, reward and incentive programmes to achieve in-house cycling targets
- 12.8.7 **REACTIVE:** offers a package of free, confidential and impartial support for small and medium-sized enterprises (SMES) - focussed along the A11 corridor in Norfolk. SMEs with the greatest potential to improve their resource efficiency and reduce carbon emissions are identified and worked with in order to realise this potential and the associated business benefits: reduced costs; comparative advantage; business growth and resilience. The Programme has addressed some elements of transport, for example eco driving courses for HGV operators, as well as grants for hybrid fuelled taxis. There could be potential for REACTIVE to branch out towards business travel plans for example.
- 12.8.8 **Station Travel Plans and Cycle Rail Toolkit:** produced by the Association of Train Operating Companies, aimed at Train Operating Companies, the toolkit sets out best practice in the provision of Cycle-Rail measures. This toolkit will help train operators embed cycle-rail provision firmly within their business objectives by explaining how to provide for cyclists, how to encourage new users, and how to promote and market their facilities to ensure that maximum benefits are gained. This is likely to be a key element in assisting in the production of Station Travel Plans. Linked to this is the work of the Cycle Rail Working Group which comprises members of the rail industry and cycling sector, and the sustainable transport charity, Sustrans. Early 2012, projects coordinated by the group received a share of £15m funding. The Group could potentially have an important role in aiding delivery of station improvements at Eccles Road as well as at Attleborough.
- 12.8.9 **Planning Applications:** Planning applications offer the opportunity to provide a Smarter Choices travel environment within the development itself and link seamlessly to the overall strategy for the town as well as provide specific elements of the strategy. The following are some specific examples, although the list is not exhaustive.
- 12.8.10 The owners of Banham Poultry have informally consulted on relocating to Bunn's Bank. The redevelopment of the existing site on Station Road could provide opportunities for improved parking for Attleborough Railway Station.
- 12.8.11 The Hamilton Acorn Brush Factory site has been granted outline planning permission. The current indicative site layout is not conducive to a walking and cycling link from the proposed bridge (T21). Discussions with the developer could result in amendments to the scheme to enable this link to be realised

Figure 24 Initial plans for the Banham Poultry site.



- 12.8.12 At Snetterton Heath Employment Area to the south/East of the A11, there are employment schemes which have planning permission (xxxxx) which could deliver v10.
- 12.8.13 When plans for the delivery of Victory Park are progressed, T26 could be provided.
- 12.8.14 Planning Obligations S106/CIL: some the schemes listed previously could also be secured through Section 106 agreements. It is also typical that Travel Plans are secured through this route. The Community Infrastructure Levy also offers the potential to pool developer contributions (in line with the regulations) for Smarter Choices improvements. It is important to note, however, that there will be many competing infrastructure requirements for developer contributions. It is recommended that as the Breckland Integrated Delivery Document is refreshed to reflect this Smarter Choices report.
- 12.8.15 BDC car park review: Whilst the review is related to the potential for charging for car parking, the recommendations related to priority carsharing spaces and electric charging points could be reflected in the report and further related work.
- 12.8.16 Liaison with Supermarkets: Some of the schemes require liaison with the supermarkets in the area. Raising the issue of providing cycle parking outside Lidl for example could be a scheme that is welcomed by the operator as it provides convenient cycle parking for cyclists who wish to use the store. Promoting the Sainsbury grocery delivery option could be welcomed by Sainsbury's as it promotes their store as well as the smarter choices benefits.
- 12.8.17 Local Sustainable Transport Fund: Since January 2011, around £600m of funding has been made available to promote cycling. A small proportion has been given to Sustrans and the Cycle Rail Working Group. The funding relied on match funding. Whilst the bidding is closed and funds are committed, there could be potential for future such funds from the Government.

- 12.8.18 Railway Franchise Discussions: Train services are run by Train Operating Companies on a franchise basis. The two traditional sources of rail industry funding / improvements are from Network Rail spending programmes and franchise renewals. A major programme of refranchising is being put underway by government. By the summer of 2015 franchises for all of the rail services into Norfolk will have been renewed. The Government's Command Paper (2012) specified that franchises will be more flexibly specified, allowing train operators to be more responsive in meeting customer demand, although they will contain. Franchises will be longer, giving operators more responsibility and more flexibility in the services they provide, as well as more incentives to invest. The Draft Norfolk Rail Prospectus details the priorities for Norfolk and will be used to lobby decision makers. This sets out what NCC feel is required to make sure rail can serve the needs and expectations of passengers as well as help deliver housing and economic growth. The document will be used to lobby rail groups and decision makers. Of relevance to the ASHLP area:
- *Support for first arrivals into Cambridge before 0700 (Mon to Sat) and 0800 (Sun). Extend last service from Cambridge to 0030 departure (Mon to Sat) and 1130 (Sun).
 - *Further work to identify journey time reductions.
 - *Better time tabling at Ely, Norwich and Peterborough to reduce waiting times.
 - *All stations and platforms to be fully accessible.
 - *Adequate car parking facilities to cater for demand
 - *Better integration between the Station and the Town Centre.
 - *Ely junction and Trowse upgrade to allow Norwich to Cambridge
 - *Infrastructure to increase line speeds
 - *Additional platform at Norwich and crossovers to enable half hourly Cambridge service.
 - *Continue to support linking Cambridge and Oxford
 - *Feasibility of freight interchange at Snetterton although further feasibility work is required
 - *Electrification of Cambridge to Norwich
 - *Attleborough is the 10th main station in Norfolk
 - *The consequence of lower taxpayer support for the railways is that passengers are now paying more of the annual cost of running the network, which today stands at around £10.5bn. Some £6.5bn comes from passenger fares and £4bn from the taxpayer.
- 12.8.19 Plug-in Car Grant⁴² and Plug-in Van Grant⁴³: Since January 2011, motorists purchasing a qualifying ultra-low emission car have been able to receive a grant of 25% towards the cost of the vehicle, up to a maximum of £5,000. The 2010 Spending Review confirmed that government has made provision to support the Plug-in Car Grant for the life of this Parliament. Since February 2012, motorists purchasing a qualifying ultra-low emission van can receive a grant of 20% towards the cost of the vehicle, up to a maximum of £8,000.
- 12.8.20 Plugged in Places: Approval for EValu8, the East of England's bid under the Plugged in Places initiative, has recently been given the go ahead. This will enable the delivery of electric vehicle recharging points across Norfolk at sites like supermarkets, town centres and park and ride. These will be delivered alongside work to educate potential users, support innovation in new products and improve the compatibility of mechanics, working with motor vehicle dealers. Such innovation could involve the generation of electricity at recharging sites, for example through solar or wind.

⁴² <https://www.gov.uk/government/publications/plug-in-car-grant>.

⁴³ <https://www.gov.uk/government/publications/plug-in-van-grant>

- 12.8.21 Green Bus Fund⁴⁴: The Green Bus Fund supports bus companies and local authorities in England to help them buy new low carbon buses. Its main purpose is to support and speed up the introduction of hundreds of low carbon buses across England.
- 12.8.22 Bus Service Operators Grant⁴⁵: is a grant paid to operators of eligible local bus services and community transport organisations to help them recover some of their fuel costs. The amount each bus company receives is based on their annual fuel consumption. The aim of BSOG is to benefit passengers. It does this by helping operators keep their fares down and enabling operators to run services that might not otherwise be profitable and might be cancelled.
- 12.8.23 Town Centre Scheme: In parallel to the production of the Smarter Choices work, the town centre element of the transport work for Attleborough has been produced. Some of the schemes identified in this report are located within the town centre. Rather than being stand alone schemes, they should form part of the town centre package. Appendix X shows these schemes.
- 12.8.24 Mode Shift Revenue Support⁴⁶: The Department for Transport runs a scheme that encourages the use of rail instead of road transport: the Mode Shift Revenue Support scheme. Mode Shift Revenue Support (MSRS) scheme (formerly the Rail Environmental Benefit Procurement Scheme) assists companies with the operating costs associated with running rail freight transport instead of road (where rail is more expensive than road). It is designed to facilitate and support modal shift, generating environmental and wider social benefits from reduced lorry journeys on Britain's roads. Budgets for the operating grants for future years are £19m for 2012-13, with a further indicative £19m for both 2013-14 and 2014-15. There is potential for any businesses considering using the Eccles Road facility to apply for this grant, which is something that could be promoted within the Norfolk area and beyond.
- 12.8.25 Say yes to Broadband: In a scheme which is the first of its kind⁴⁷, Norfolk County Council has appointed BT to install "super fast" broadband throughout Norfolk to ensure it is better connected. Linked to the drive by the current Government to improve connection nationally it is seen as an important step in improving internet connection for Norfolk. The Council will need to argue Attleborough and Snetterton Heath's case and hopefully move the area up the order of delivery.
- 12.8.26 The region-wide rail prospectus⁴⁸ outlines a number of key strategic priorities for East Anglia. The improvements within the prospectus that relate directly to Norfolk are:
- Delivery of Norwich in 90 including new or fully refurbished trains
 - ½ hourly services to King's Lynn throughout the day served by new high quality Inter City Express Trains
 - ½ hourly services between Norwich and Cambridge
 - Fully upgrade Ely North junction and related infrastructure
 - Improvements to reliability
 - Refurbished stations
 - Smartcard ticketing.
- 12.8.27 High Level Output Specification (HLOS) and Statement of Funds Available or SoFA. The process now is for the rail industry (essentially Network Rail) to agree with the Office of Rail Regulation a costed package of measures that will achieve government's specification. This will be worked up over the next few months – with consultations during 2013 – so that it is agreed for the five-year spending period 2014-19. Highlights for the county include:
- Ely Junction upgrade is specifically named.
 - £300 million to fund journey time and performance improvements.

⁴⁴ <https://www.gov.uk/government/publications/green-bus-fund-round-3>

⁴⁵ <https://www.gov.uk/government/organisations/department-for-transport/series/background-to-the-bus-service-operators-grant-bsog>

⁴⁶ <https://www.gov.uk/government/publications/guide-to-mode-shift-revenue-support-msrs-scheme>

⁴⁷ <http://sayyestobroadband.co.uk/>

⁴⁸ <http://www.newanglia.co.uk/Assets/Files/Content/Rail%20prospectus%20for%20East%20Anglia.pdf>

- Up to £100 million over CP5 to fund station infrastructure improvements, including better passenger information and up to £100 million over CP5 to fund 'Access for All' measures to provide easier access for older or disabled passengers and those with small children.
- 12.8.28 Network Rail is responsible for the maintenance and improvement of infrastructure, such as track, signalling and level crossings. Their spending programmes are divided in to five-year periods. Planning is ongoing to develop the spending programme for 2014-19, known as Control Period 5 (CP5). Government has already set out how much money will be available for the spending plan in CP5. Network Rail will now refine its Initial Industry Plan – produced before the funding announcement to show what the rail industry considered as important to deliver during CP5 – into a detailed spending programme. There will be consultation on this in early 2013.
- 12.8.29 Connecting Norfolk Implementation Plan for 2011-2015 LTP3: Again, whilst not mentioned specifically, the Smarter Choices related priorities will be to secure improvements that enhance public transport, walking and cycling access to employment and key services, like schools.
- 12.8.30 Travel plans for new developments will continue to be secured. Over the next four years our aim will be to move towards a self-sustaining model of travel planning in Norfolk; one that does not require continued investment from the public sector. All travel plans agreed through the development control process will be bonded, which places an obligation on the developer to undertake any measures agreed. Establishing a social enterprise to coordinate this will be investigated. Work on the Motiv8 model of area-wide travel planning will also continue, with officer support being given where required to the two pilots in Norwich.
- 12.8.31 The promotion of active travel for short journeys will be a priority for future travel campaigns. These will be targeted in our market towns and urban areas and include measures like personalised travel planning, Bike It schemes in schools, cycle master classes and sign audits.
- 12.8.32 Work with the community and local partners to improve access to services will continue. This includes support to community led initiatives like the Norfolk Car Club, which provides pay as you drive low carbon vehicles in Reepham, Aylsham, Cawston and Norwich, in addition to coordination of projects like Access4Life in north-west Norfolk, which is in its second year of delivery in 2011/12.
- 12.8.33 Norfolk's landmark project, Transport Plus, which looks to integrate transport for health, social and well-being journeys, will continue to develop. We will build on our established partnership with the East of England Ambulance Service and expand our joint transport planning service, to maximise the opportunities available as we work increasingly closer with the NHS to drive efficiencies.
- 12.8.34 Local Enterprise Partnerships and Local Transport Bodies: Although not specifically mentioned in the table, there could be a role for LEPs. Furthermore, Local Transport Bodies are likely to comprise a mix of Local Enterprise Partnerships and local transport authorities. For this area, the LTB will cover Norfolk and Suffolk.



LEPs to have say over transport cash

By **John Geoghegan** Thursday, 27 September 2012

Business-led local enterprise partnerships (LEPs) will play a key role in deciding how Whitehall transport cash is spent, transport minister Norman Baker has announced.



Tagged by: [England](#), [Transport development](#), [Policy and Politics](#), [Transport](#), [Economic Development](#)

The Department for Transport (DfT) has said it will proceed with plans to devolve funding for major local transport schemes to new local transport bodies (LTBs) from 2015.

In a report, it said LTBs will be "voluntary partnerships of local transport authorities, local enterprise partnerships and possibly others".

The DfT revealed the proposals in February before launching a consultation, which, it said, showed "broad support" for the bodies.

Its response to the consultation says LTBs will be "broadly based on the geography of LEPs and ideally determined by local agreement".

Currently, central government must approve all schemes over £5 million and fund them as part of a bidding process. Under the new proposals, funding will be allocated locally according to population size, with priorities decided by LTBs without Whitehall approval.

The DfT has said there will be no minimum threshold for projects though it wants LTBs to set their own threshold for "local priority" schemes.

It also said that indicative figures for how much each LTB will receive will be published next month when the geography of each body is confirmed.

Baker said: "We want decisions on new transport infrastructure to be made more efficiently, and at a more local level than has previously been the case.

"While it is right for the government to look at the big picture and co-ordinate schemes with a national impact, there is no substitute for local knowledge.

"That is why we want to make sure that important decisions affecting the future of towns and cities across England are made by those who best understand the specific issues facing their communities."

LTBs, the report said, will need to demonstrate that they are providing good value for money under guidance to be shortly provided by the DfT.

The government last week announced £25 million of funding for LEPs until the end of this Parliament, subject to match funding.

Related Links

[LEPs offered £25m of core government funding](#)

[New DCLG minister backs call for LEPs to be funded](#)

[Pickles aide: jury still out on LEP effectiveness](#)

[Transport cash devolution planned](#)

[Transport cash to be devolved to sub-regional bodies](#)

- 12.8.35 Funding Mechanisms for new Bus Services.** The forecast increase in residential dwellings south of the railway and new employment development in Attleborough and at Snetterton Heath will inevitably increase the demand for public transport. The re-routing of existing services would require discussions with service operators and would need to be financially viable (with or without subsidisation) in order for them to consider a change of route. The fact that there are two operators currently providing services between Attleborough and Norwich suggests that neither operator would want to deter passengers by increasing journey times or reducing service frequency in order to accommodate a change of route. However, if sufficient demand could be demonstrated or subsidies provided to make the changes worthwhile then one of the operators may be open to such service revisions. The following case study illustrates that subsidised bus services introduced at tax payers' expense can take off and become commercially viable and self sustaining.

Case Study box - Salford Star

A subsidised bus service between Salford Crescent Rail Station and MediaCityUK was launched in September 2011 offering free travel for students and fares of £1 for everyone else. Initial 'kickstart' funding for the service was pulled by the ConDem Government, although a contribution of £330,000 from the Green Bus Fund towards buying four shuttle buses was made.

In the absence of kiskstart funding the University of Salford committed a "fixed amount" towards the costs of operating the service on the proviso that students would get free travel on the bus. TfGM (as was GMPTE) agreed to pay 25% of the "gross costs" with Salford City Council funding the rest. The service introduced operated at a frequency of every ten minutes during the week (Mon-Fri 7am-8pm) and every 15 minutes at weekends and evenings (8-11pm).

Papers from the Greater Manchester Integrated Transport Authority indicated that "Data on student movements from the University of Salford and a Travel Survey of BBC Manchester and London staff was used to assist with the evaluation of the options and confirm an appropriate level of service".

One year on and the service has been pulled to be replaced by Manchester's first cross-city bus link for some years as Stagecoach extends its service 50 from Albert Square to Salford Crescent and onto the Quays on a commercial basis!

The frequency will be every 10 minutes on Monday to Saturday daytimes, with evening and Sunday daytime services up to every 15 minutes. This is an improvement over the current Saturday daytime frequency of every 15 minutes, and there will be earlier departures in the morning. Stagecoach will be using their standard double deckers, which offer more seats over the hybrid Optare Versas currently in use – and TfGM will be able to deploy the spare vehicles elsewhere in the county.

The aim of making this link a commercial proposition has happened sooner than expected saving public money on funding the service through TfGM and Salford City Council funding.

12.9 MONITORING AND EVALUATING?

12.9.1 It will be essential to monitor the Smarter Choices Strategy. Annual monitoring can assess the effectiveness of the schemes and determine if they were a success or a failure and if they offered value for money. From this assessment, the Strategy can learn from its successes and failures and improve the offer going forward.

12.10 MODE SHARE TARGETS

12.10.1 The main headline target is for a reduction in single occupancy car use for the journey to work by 10% to bring levels to the England and Wales average (Census 2001). This will be attained by more people using Smarter Choices, with the mode share of Smarter Modes consequently increasing. This will be measured through the 2021 Census.

12.10.2 Attleborough's mode share split has been selected as this is the main population centre in the area and the area where most change will be taking place.

12.10.3 These targets are medium term targets (to 2021), measured at a strategic level through the Census. Any Smarter Choices Team that is set up may take an approach whereby intermediate targets are set up or the team may review targets over time.

12.10.4 The 2011 Census may show a different situation; however at the time of writing, this information was not available. The targets, set around the driving a car or van mode share, may thus require reviewing.

	Who work mainly at or from home	Underground metro light rail or tram	Train	Bus mini bus or coach	Motorcycle scooter or moped	Driving a car or a van	Passenger in a car or van	Taxi	Bicycle	On foot	Other
ENGLAND AND WALES 2001	9.19	3.01	4.08	7.40	1.09	55.23	6.25	0.52	2.76	10.01	0.47
Attleborough 2001	8.76	0.00	0.95	1.93	0.95	64.76	7.03	0.20	5.07	9.85	0.50
Attleborough 2011	Awaiting Data.										
Attleborough 2021	10? ^A	0	2.5? ^B	4? ^C	1?	55? ^D	10? ^E	0.5 ^F	17 ^G		0

A: With better Broadband and increased fuel costs, more people could work from home.

B: With the improvements to the trains as proposed for lobbying in the Draft Norfolk Rail Prospectus, the train could prove an attractive mode of transport. Having said that, the provision of employment in the area in line with housing could see better self containment, although the train could be used for trips to Snetterton Heath (Eccles Road).

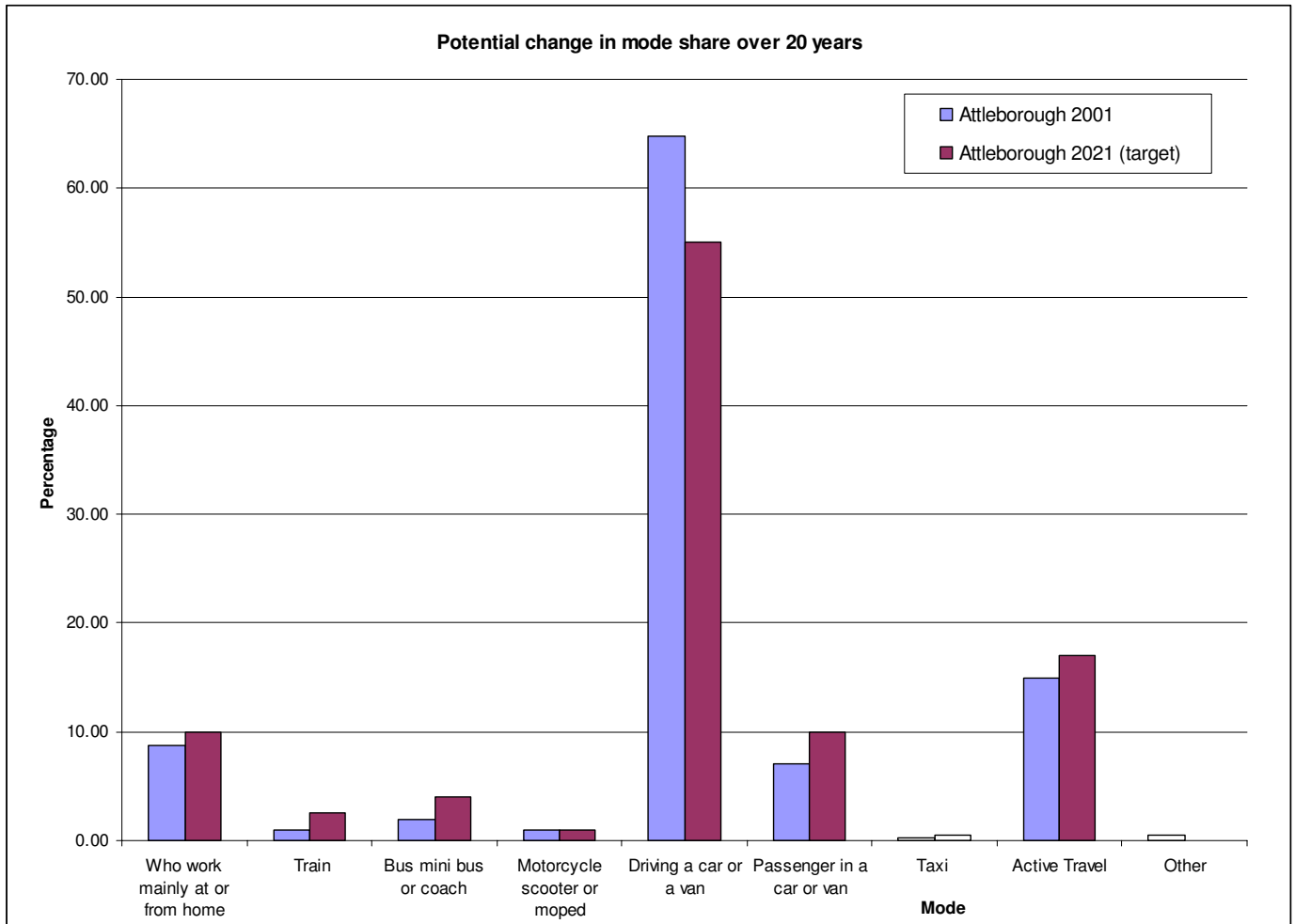
C: Improving the bus service in the area, including the Snetterton Heath Orbital/Shuttle bus could see the bus being a more popular mode of transport.

D: With the improved offer of Smarter Choices as set out in this report, as well as rising fuel costs, single occupancy car use could become less popular. This percentage reflects the 2001 national average.

E: Car Sharing is likely to be the area in which there is potential for great increase in mode share. By promoting the website, and with car sharing being just as convenient as a car, but at least half the cost (perhaps more if more passengers in the car), it is likely to be seen as a very attractive alternative to single occupancy car use.

F: A slight increase in the use of taxis is suggested. This could be as a result of the promotion of Taxi Buddi.

G: Active Travel levels are similar or higher than the 2001 national average. Whilst only a modest increase of around 2% is suggested, it is hoped that in general there will be a year on year increase in usage. It is likely that the greatest increase could be for the journey to school, which is not addressed in the above table.



12.11 HOW TO MONITOR?

12.11.1 A baseline survey is required initially. This will show the current situation, without any specific interventions resulting from the Smarter Choices Strategy. Monitoring can then take place annually, to determine the success or failure.

12.11.2 An agreed set of indicators would be monitored. Indicators need to be 'SMART':

- S Specific
- M Measurable
- A Achievable
- R Relevant
- T Time-bound

12.11.3 Indicators will be required for each of the modes in the mode hierarchy. The recommendations table shows suggested headline indicators.

12.12 DATA SOURCES

12.12.1 Company/Organisation Data: This is a valuable source of data. In some instances, however, some companies/organisations are less willing to provide up to date data due to competing businesses.

12.12.2 Traffic counts: This data could provide information that is of use to assessing the impact of the Smarter Choices Strategy. Such counts are usually required to monitor other schemes in the area, such as the dualling of the A11 and potentially as and when the Link Road is developed.

12.12.3 Travel Plans: Monitoring will be undertaken for each masterplan. The data provided would be useful and could result in efficiency in data collection.

12.12.4 Bespoke studies: Depending on the target audience, there are various methods of undertaking surveys to help monitor and evaluate.

12.12.5 Online surveys are easier and quicker to analyse, but not everyone has access to a computer. As such, Businesses and Schools could benefit from online surveys, perhaps using Survey Monkey for example.

12.12.6 Mail drop questionnaires are more accessible by everyone, although require people to send back to a specified address which could affect return rates, and requires manual analysis which could impact on resources.

12.12.7 The Census offers another data source which can be drawn down to local level data. This is undertaken once a decade however and the questions asked are not set locally.

12.12.8 The return rate for completed questionnaires is an important factor. The Station Travel Plan Pilots for example, found that with much effort, there was typically only a 2-3% return rate. The pilot report goes on to state that return rates of 30% are ideal.

12.12.9 The promise of returned responses being entered into a prize draw can be attractive, especially for school pupils. Local businesses and local Councils can be approached to donate a prize, which is preferably healthy.

Appendix A – Attleborough and Snetterton Heath Walking and Cycling Network, Showing Improvements.

A.1 TOWN WALKING AND CYCLING NETWORK

A.1.1 The walking and cycling network which shows areas for improvements is shown at Figure xx. An explanation of the route colouring is given below:

- **Red** – Improvements for Cycling Required. Whilst people may cycle along this route now, this grading reflects that improvements will be needed to either allow cycling legally (for example changing a footpath to a bridleway) or to improve the attractiveness of the route (for example to make provisions to improve safety or help people feel safe to cycle).
- **Purple** – Improvements for walking and cycling required. Dashed lines indicated new links. Solid lines indicate areas where people may currently walk and cycle, but improvements will make this route more attractive and feel safer.
- **Green** – currently suitable for walking and cycling. There is no obvious reason why people cannot walk or cycle along this route currently.
- **Blue** Train Track Symbol – Currently suitable for walking. Mostly combined with red or yellow, this indicates that people can walk along this route now.
- **Yellow** – Improvements for walking required. Combined with the blue train track symbol, but indicates that there are some improvements needed to make this route more attractive for walking. Perhaps the surface or lighting. This is not purple or red as cycling is seen as not being appropriate along this route.

A.1 VILLAGE AND EMPLOYMENT AREA WALKING AND CYCLING NETWORK.

A.1.1 The walking and cycling network which shows areas for improvements is shown at Figure xx. An explanation of the route colouring is given below:

- **Green** - currently suitable for cycling. Whilst these maybe on road routes, there is no obvious reason why more confident cyclists cannot cycle along this route currently.
- **Orange** - Whilst people may cycle along this route now, this grading reflects that improvements will be needed to either allow cycling legally (for example changing a footpath to a bridleway) or to improve the attractiveness of the route (for example to make provisions to improve safety or help people feel safe to cycle). Dashed line indicates a new link.
- **Brown** Train Track Symbol - Currently suitable for walking.

Figure 25 Town Walking and Cycling Network Showing Areas for Improvement.

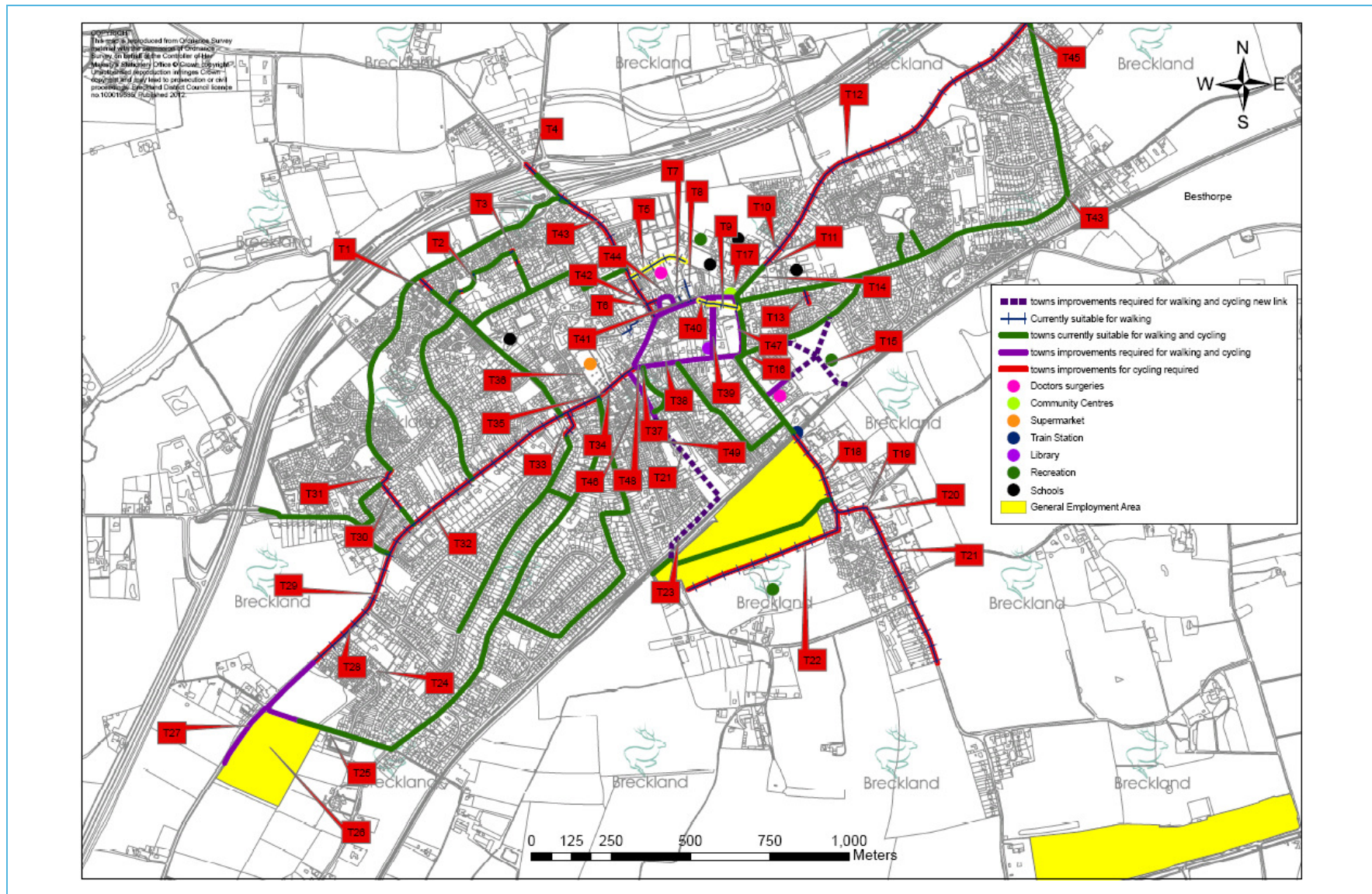
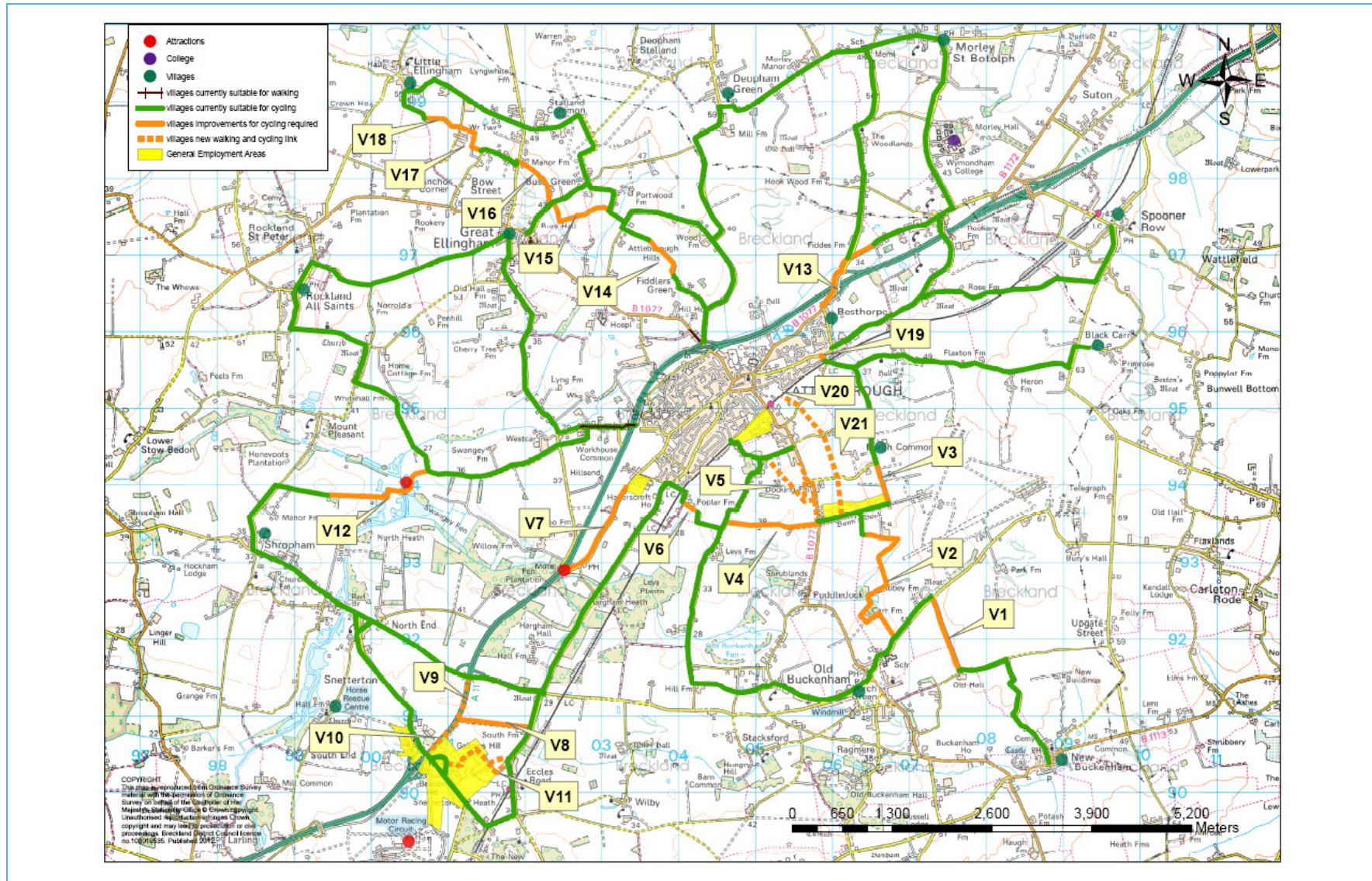


Figure 26 Village and Employment Area Walking and Cycling Network Showing Areas for Improvement.



Appendix B –Schedule of Improvements to the Town Walking and Cycling Network

Reference	Recommendation	Detail	Cost	Priority	Likelihood of deliverability
T1	Widen existing path by 1m for 58m into the verge. Provide dropped kerbs to allow access from Blackthorn Road. TRO to convert to shared use path.	Currently a 1.6m path for pedestrians.	£15,055.00	low to medium	High
T2	Replace 3 sets of barriers with a form of barrier that is more cycle friendly.	Along this part of the route, the 3 sets of staggered barriers deter bonafide users.	£3,250.00	medium	High
T3	Replace barriers with a form of barrier that is more cycle friendly.	Along this part of the route, staggered barriers inconvenience bonafide users. Note that these barriers are probably the most cycle friendly. If anti social behaviour in the form of motorcycles or quad bikes use the path, an A frame could be used, although these inconvenience cyclists even more than the existing barriers	No further action. Leave barriers as they are now.		
T4	Replace all pedestrian signals and puffin boxes with TOUCAN signals and boxes. Ensure all boxes have the tactile cone underneath. Remove signing directing cyclists to dismount. General declutter and rationalisation of signage at this junction.	Whilst cyclists are provided for on the links at this busy junction with the A11, the crossings are PUFFIN and not TOUCAN. As a result there is much signage clutter directing cyclists to dismount and indeed cyclists legally cannot cross whilst on their cycles. It appears that many signs could share the same pole for example.	£30,000.00	medium	Medium
T5	Replace lighting with more regular lighting along the entire length of the route. Path also disturbed by tree roots.	In general suitable for walking currently in the main, as the path travels around the car park to the sports centre and rear of the Infant School, the surface is poor and disturbed by tree roots. A geotextile impregnable membrane could be used.	£4,185 - £6,135	High	High
T6	Link off Queen's Road through barriers to Queen's Square for cyclists. Combined with X6.	This would be a useful link to bypass the main roads to access the sports centre, Barclay's Bank and shops in the area.	£2,300.00	medium to high	As part of town centre scheme/medium
T7	Re-surface to remove trip hazards and improve drainage.	This route links Church Street to one of the Lloyd's Pharmacies, the sports centre and the main car park. The surface is uneven in parts and has poor drainage. The barriers inconvenience mobility scooters.	£11,240.00	High	As part of town centre scheme/high
T8	Reconsider barrier arrangement so as to not inconvenience wheelchair users, people in mobility scooters and people with pushchairs. Improve provision of lighting along these routes.		£19,775.50	High	As part of town centre scheme/high
T9	Re-surface path through church yard. Use sensitive surface to reflect setting of listed building. Ensure no trip hazards.	The current surface can cause trip hazard problems for older people or less mobile people who use the route to access Hollycourt.	£54,000.00	medium to high	As part of town centre scheme/medium
T10	TRO to allow cycling from entrance to High School to Eastland Close on the north side of Norwich Road - i.e. extend the existing shared use. Widen existing footway by 0.5m for 85m into verge.	This would provide a useful link from Eastland Close.	£10,270.00	medium	Medium
T11	Consider removing the redundant railing.	This barrier narrows the footway near the High School and seems to be redundant as the access onto the footway in this location is locked. The use of the gate would need to be assessed to see if the barrier should be retained.	£90.00	medium	Depends on how frequent access is used.
T12a	Mandatory or advisory cycle lanes for the entire length of Norwich Road. 1.3km. This would require a local departure from standards due to road width.	With Norwich Road being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. The provision of mandatory cycle lanes will see the redistribution of road space which will help cyclists in terms of providing space for cycling but could reduce vehicle speeds. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists.	Not costed	High	Low - departure from standards required.
T12b	Signage to highlight cyclists.		£3,000.00	High	High
T13	TRO to convert paths from Paddock Gardens to Junior School to shared use. Re-consider barrier arrangement Bestrope Road end of path - duplication, alternatives as well as style of existing.	The paths are over 2m in width. If required to be widened, could extend into verge. There are concrete bollards as well as extensive metal railings to divert users to the raised crossing. Both might not be necessary.	£3,500.00	low to medium	High

Appendix B –Schedule of Improvements to the Town Walking and Cycling Network

T14	Reconsider the barriers near to the TOUCAN crossing of Norwich Road near the High School.	The combination of the verge and barriers narrows the footway in this position. By removing the barrier, extra space will be available.	£700.00	High	medium
T15	Provision of surfaced, lit links within the recreation area in three directions shown. 3 shared use links for a total distance of 500m. Linked with V20 and v21.	Potential issue could be the loss of open space in this area to surfaced and lit paths. There appears to be an electricity supply in the area as there are some flood lights present. Route paths take would need to consider the uses of the open space - area could be used for cricket and football so location and direction of paths should not prevent this use.	£119,264.00	Depends on location of urban extension and related desire lines.	Delivered as part of development to south of railway.
T16	Realign junction to tighten splay to benefit pedestrians. Potential for run over area to be used by HGVs.	Concerns were expressed regarding the speed of traffic into Thieves Lane. Further more, pedestrians waiting have to look over their shoulder or turn their body to check no traffic entering from Surrogate Street. Whilst the Fire Service are stationed down Thieves' Lane, they are only likely to come round this junction in order to return to the premises, rather than use it in an emergency. Also, it could be that the more convenient entry could be from Besthorpe Road. Used by Fire service through, so consultation necessary. Vehicle swept path analysis must be used.	£3,925.00	medium to high	Medium
T17	Shelter over cycle parking at adult education centre. Ensure use by visitors.	The cycle parking, which is in a good location and a good type, could benefit from a shelter. Issues to consider could be impact on townscape and in a conservation area. It was also noted that it seems that according to the sign, the cycle parking is for staff only.	£3,000.00	medium	Liaison with adult education centre required.
T18a	mandatory or advisory cycle lanes along Station Road to link with T16	With Station Road being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. The provision of mandatory cycle lanes will see the redistribution of road space which will help cyclists in terms of providing space for cycling but could reduce vehicle speeds. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists.	not costed	High	Low - departure from standards required.
T18b	Signage to highlight cyclists.	Mandatory would require TRO	£3,000.00	High	High
T19	Reconfigure junction of Whitehouse Lane and B1107.	This junction is extremely wide. It is difficult for pedestrians to cross. requires swept path analysis to track the sweep of HGV's	£15,500.00	Depends on location of urban extension	Provided as part of urban extension
T20	Cut back hedge on east side of Norwich Road.	The hedge has not been maintained and acts as an obstacle for pedestrians.	£2,500.00	High	High
T21a	Advisory cycle lanes from the level crossing to Bunn's Bank. 1.7km. This would require a local departure from standards due to road width.	With the B1107 being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists. Could be a short to medium term issue, depending on direction of development and if V5, V20 and V21 delivered.	Not costed	High	Low - departure from standards required.
T21b	Signage to highlight cyclists.		£3,000.00	High	High
T22	TRO to convert footpath to bridleway. Surface path with appropriate surface to reflect the rurality of the route. 580m.	This route currently is a footpath through Gaymer's Meadow. If development occurs to the west, this path could provide a direct route to the B1107 and Station Road.	£175,720.00	Depends on location of urban extension and related desire lines.	Provided as part of urban extension
T23	Provision of new pedestrian and cycle bridge over the railway. Closure of Ley's Lane Level Crossing. Provision of surfaced, lit links towards and through the Hamilton Acorn Brush Factory. Links through provided as part of development. Link to development from bridge would be 2.5m wide path for 180m.	Breckland own the slither of land running alongside the railway. There is outline planning permission for 86 dwellings and open space (3pl/2011/0489/0) - negotiation required with promoters.	£343,500 (plus possession costs that could be 50% more)	Delivered as part of factory redevelopment and urban extension.	Would require negotiation with promoters of Hamilton Acorn Brush Factory site. Bridge provided as part of urban extension development.

Appendix B –Schedule of Improvements to the Town Walking and Cycling Network

T24	Consider changing status to allow cycling. TRO.	This link could act as a useful short cut in the future. A footpath at the moment that is around 2m wide with no scope for widening. It is likely that people will cycle along it currently. Allowing cycling could be of benefit. This is substandard and would need a local departure from standard	£1,360.00	medium	Would require departure from guidance.
T25	Footway on south side of New Road from where existing one ends to junction with Hargham Road. 250m.	The footway stops on the south side of New Road just east of the entrance to Haverscroft Industrial Estate. Continuation could be useful for journeys to work.	£85,000.00	high if employment development goes ahead.	Delivered as part of developing employment allocation.
T26	Shared use link between Breckland Body Tech (number 28) and number 29 Haverscroft Industrial Estate. 50m.	A cut through from the existing industrial estate to the allocation that is yet to be developed, for pedestrians and cyclists could be useful. New development on the allocation should continue the link in a convenient and safe way with appropriate barrier arrangements that do not inconvenience bonafide users.	£27,500.00	high if employment development goes ahead.	Delivered as part of developing employment allocation.
T27	Footway between allocation for employment land and New Road. 135m.	A short stretch of footway has been provided from the entrance to the employment allocation north on the east side of the London Road, but falls short of New Road.	£45,900.00 (footway) or £70,710.00 (shared use)	high if employment development goes ahead.	Delivered as part of developing employment
T28	Footway on the southern side of London Road from where it ends to New Road. 350m.	Whilst designated as open space, there has been interest registered in developing the parcel of land within New Road and London Road. If this were to come forward it is recommended that a footway be provided that joins up with the existing footway on the south/east side of London Road. This footway should continue into New Road to join up with the existing footway on the northern side of New Road.	£86,750 (footway) or £226,000 (shared use)	high if development goes ahead.	Provided as part of development
T29	Footway on northern side of London Road between proposed development and West Carr Road (100m) and between proposed new development and opposite New Road (50m)	There is a planning application in for 375 dwellings (3pl/2012/0958/H). A footway is proposed along the length of London Road immediately in front of the proposed development. It is not proposed to join up with the existing footway at West Carr Road. Furthermore, there is no proposals to provide a footway from the southern extent of the development to near to the junction of New Road. Note that verbal discussions with Senior Planning imply this link will be provided, although not shown on plans.	£43,750 (footway) or £418,000 (shared use)	high if development goes ahead.	Provided as part of development
T30	Convert to allow cycling.	These links could act as useful short cuts. A footpath at the moment that is around 2m wide with no scope for widening. It is likely that people will cycle along it currently. Allowing cycling could be of benefit.	£640 - £1,040	medium	Would require departure from guidance.
T31	Consider changing status of link between High View drive to Snowdrop Drive to allow cycling.	These links could act as useful short cuts. A footpath at the moment that is around 2m wide with no scope for widening. It is likely that people will cycle along it currently. Allowing cycling could be of benefit.	£740.00	medium	Would require departure from guidance.
T32a	Advisory or Mandatory cycle lanes from near the town centre to Haverscroft Industrial Estate. 1.6km. This would require a local departure from standards due to road width.	With the London Road being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists. The provision of mandatory cycle lines will see the redistribution of road space which will help cyclists in terms of providing space for cycling but could reduce vehicle speeds. The road is between 6.7 and 7.5m wide. Parts of route could see the provision of shared use facilities delivered as part of new development, but this would not be continuous into the town centre.	not costed	High	Low - departure from standards required.
T32b	Signage to highlight cyclists.		£3,000.00	High	High
T33	Widen footpath by 0.7m for 42m. Convert to allow cycling.	This link is currently only a footpath. Part is nearly 4m wide.	£8,200.00	medium	Medium
T34	Consolidate or reposition A Boards outside Londis. Liaison with shop owner.	There are many A Boards outside Londis. These seem to cause obstacles. Quote section 137 of the Highways Act 1980 – wilful obstruction of the free passage along H/way.	£0.00	High	High
T35a	Remove/reduce scale of brick column on western access to Sainsbury.		£10,548.00	medium to high	Liaison with Sainsbury's required.
T35b	Remove/reduce scale of brick column on eastern access to Sainsbury.	This structure reduces visibility of pedestrians when trying to cross the road.	£10,548.00		

Appendix B –Schedule of Improvements to the Town Walking and Cycling Network

T36	Shelter over cycle parking at Sainsbury's	The cycle parking, which is in a good location and a good type, could benefit from a shelter.	£3,000.00	medium	Liaison with Sainsbury's required.
T37a	Re-align Edenside junction. Make narrower and tighten visibility splays.	The Hamilton Acron Brush Factory is now closed, so few HGVs are likely to drive down this road. The junction is very wide, perhaps needlessly.	£4,075.00	medium to high	Medium
T37b	Provide pedestrian refuge on desire line.		£4,000.00		
T38a	mandatory or advisory cycle lanes along Connaught Road	With Connaught being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. The provision of mandatory cycle lanes will see the redistribution of road space which will help cyclists in terms of providing space for cycling but could reduce vehicle speeds. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists.	£3,000.00	As part of town centre scheme/high	Low
T38b	Shared use paths on Connaught Road. Road width is 6m. Widen one or both footways by 0.5m for 330m.	An alternative is to re-distribute road space to widen the footpaths on this road to allow cycling. This would enable cyclists to cycle in both directions on Connaught Road. Parking outside library could be retained or removed.	£86,875.00	As part of town centre scheme/high	Medium
T39	link through the central island of the gyratory near library and hollycourt.	This would take advantage of the route and access to Hollycourt either side. This is currently used as short cuts solely for the residents of Hollycourt. This would cross Library owned land, land owned by Hollycourt and also land owned by the Church. Liaison with Hollycourt required. Likely to be only pedestrians as Station Road can be used for cyclists. Potential for conflict with residents of the care home.	£500.00	medium	Requires land ownership negotiation. As part of town centre scheme/medium
T40	Improve drainage at crossing on Church Street	When it rains, the area where people stand to wait to cross floods.	£1,500.00	High	Medium
T41a	Remove railing at puffin on Church Street	At this location, the railings narrow considerably the footway. LTN 02/09 – gives advice; pedestrian no's. required for assessment.	£320.00	High	Medium
T41b	Consider a zebra crossing instead of Pelican Crossing.	Could assist in flow of traffic and reduce impact on streetscape. Would need careful consideration and discussion with safety experts.	£20,000 or £35,000	medium	Medium - depends on safety audit. As part of town centre scheme/medium
T41c	Pelican crossing in Church Street - tactile beacon only on one box. Provide on other box.	This will help disabled people.	£1,000.00	medium	Medium
T42a	Reduce width and splays of access to Lidl from Queen's Road	This is a busy access. Currently it is very wide. Need to consider turning circle of deliveries.	£3,700.00	High	Liaison with Lidl required.
T42b	Relocate the speed bump at the access to Lidl from, Queen's Road.	This is currently on the desire line and where the tactile paving directs a pedestrian and could be a trip hazard to those who are less mobile.	£500.00	High	Liaison with Lidl required.
T43a	mandatory or advisory cycle lanes along Queen's Road	With Queen's road being a busy route with a mix of traffic types, it is likely that only more confident cyclists are likely to cycle on the road. The provision of mandatory cycle lanes will see the redistribution of road space which will help cyclists in terms of providing space for cycling but could reduce vehicle speeds. Advisory cycle lanes could be provided and with the consideration campaign, could benefit cyclists.	not costed	High	Low - departure from standards required.
T43b	Signage to highlight cyclists.		£3,000.00	High	High
T44a	Widen footways at Barclays Bank	Parked cars tend to overhang the footway, reducing width for bonafide users.	£2,700	High	As part of town centre scheme/high
T44a	Widen footways and add bollards on edge of footway near Barclays Bank		£6,600.00	High	
T45	Mill Lane/Silver street large junction - reduce junction width and splays.	If development occurs to the east of Attleborough, more people could travel along Silver Street. This is a large junction which could cause some problems.	£8,174.00	High if development to the east of the town.	Part of development.

Appendix B –Schedule of Improvements to the Town Walking and Cycling Network

T46	Convert to bridleway.	Eden Lane is not a road nor is it designated as a PROW. Improved surface could be useful. Could be provided potentially as part of factory redevelopment/urban extension. Cost depends if just widening or new link. Links to T21	£16,060 - £69,000	High once development in this area underway and level crossing closed.	Could be provided potentially as part of factory redevelopment or urban extension.
T47	Re assess white lining on shared use path on east side of Station Road to ensure in line with current regulations.	Local pointed out that visually impaired are confused by the white line and think it is the end of the carriageway and could stumble thinking they need to step down. It does not fit with current guidance provided in LTN 1/12 and LTN 2/08 which indicates that... 7.61 Buffer zones can be used to accommodate street furniture, etc., which might otherwise obstruct the cycle track. Where the buffer zone is surfaced in the same material as the cycle track, it is recommended that it is not marked in any way – it could be confusing to motorists, who might mistake a line for an edge of carriageway line at night, and in any case it is unlikely to be necessary (see paragraph 6.22).	£6,000.00	medium to high	Medium to high
T48					
T49	As part of development of Hamilton Acorn Brush Factory improve and widen this link to allow a shared use path. To be provided as part of development.	This popular link is not suitable for cyclists and has poor visibility which could deter its use. There is outline planning permission for 86 dwellings and open space. Potential for an improved link to be provided. Negotiation with promoters required.	£15,000.00	Delivered as part of factory redevelopment and urban	Would require negotiation with promoters of Hamilton Acorn
T50 not on map	Benches around the town: Mill Lane, Norwich Road, near police station, on Blackthorn road	These locations were suggested by a local resident.	£3,000.00	medium to high	Medium
T51 not on map	Signing of entire network with timings to destinations.	Signs at interchanges potentially on existing posts. A signing exercise would be required to determine the best locations and number of signs on existing posts. This would result in an accurate cost. Cost given is for individual signs, not lit, with or without pole. Signs could have time to distance or distance, or both.	New sign on new post = £250 New sign on existing post = £150. Assume 80 signs, half on existing post and half on new post: £16,000.	High	High

Appendix C – Schedule of Improvements to the Village and Employment Area Walking and Cycling Network.

Ref number	Destination	Interventions	Notes	Cost	Priority	Likelihood of deliverability
V1	New Buckenham	Convert from footpath to brideway	This route is currently a footpath. There is a surfaced route all the length of an acceptable quality for cycling. Suitable for cycles with thicker tyres.	£2,500.00	medium	medium
V2	Old Buckenham and New Buckenham	Provide new brideway. Compact surface to provide an adequate surface for cycling.	Whilst the footpath route on the map seems to be direct, the route goes through the middle of fields. It is likely to be more acceptable for the brideway to skirt around the edge of the fields. It is not proposed to provide a surfaced route rather provide a compacted surface for cycles to ride on. Suitable for cycles with thicker tyres.	£7,500.00	medium	medium to low
V3	Bunn's Bank, Old Buckenham and New buckenham	Turn into brideway.	This is not a PROW and not highway. Liaison with landowner will be required to allow some access. Surface appears to be acceptable, although may need some maintenance to vegetation. Note that at the Bunn's Bank end of the route there are gates which might be locked on occasion. Suitable for most cycles.	£7,500.00	medium to high	medium
V4	Bunn's Bank and urban extension	Turn into brideway.	This is not a PROW and not highway. Liaison with landowner will be required to allow some access. Surface appears to be acceptable, although may need some maintenance to vegetation. Suitable for most cycles.	£7,500.00	Part of development	Part of development
V5	Bunn's Bank and urban extension	Direct, coherent, lit and obstacle free and barrier free shared use path from near to Bunn's Bank, through new development to link up with Ley's Lane crossing. With links off and onto as appropriate. 1.2km	To be provided as an integral part of the new development, will provide a convenient walking and cycling link to Bunn's Bank. Will have other links onto it as appropriate. Should be a good surface for all cycles.	£645,000.00	Part of development	Part of development
V6	Bunn's Bank and urban extension	Turn into brideway.	This short link, through the farm, would link up two legs of this route. Potential issues regarding conflict with farm workings to consider. Suitable for most cycles.	£7,500.00	Part of development or medium	Part of development or medium
V7	Breckland Lodge	1.4km footway on both sides of London Road. Assume either on verge or on what is currently agricultural field. Continuation of advisory or mandatory cycle lanes from T32 for 1.4km.	Breckland Lodge could be a destination for residents in Attleborough. The town could expand towards the south west of the town bringing the limit of the built up area closer to the pub. See T27, T28, T29 and T32 for potential improvements north of the new employment allocation. If development occurs to the south west, new development should provide a footway along its road frontage that joins up with existing footways to provide a continuous route. Suitable for all cycles.	£700,000.00	Part of development	Part of development
V8	Snetterton Heath	Turn into brideway.	A surfaced link exists, but this is not a PROW nor highway. Potential issues regarding conflict with farm workings to consider. Suitable for most cycles.	£7,500.00	medium	Medium to Low
V9	Snetterton Heath	Shared use path inside A11, continuing V10. 601m.	Would be as an alternative to V8.	£238,000.00	medium	Medium to Low
V10	Snetterton Heath	Making good and continuing the redundant old A11 from the Employment Area to V8 and V9 600m. To include appropriate link at Employment Area end onto the route and appropriate links into the proposed developments along the route.	Note that there are 3 planning applications for the land to the east of the A11 in this area: 3pl/2012/0105/F (Proposed steel frame, metal clad B8 Warehouse with ancillary offices, permission), 3PL/2007/1734/H (a renewal to an application for an extension to QD storage, and has a Time Limit extension approved) and 3pl/2012/0476/O (permission for an outline proposal for 7 new industrial buildings). Suitable for all cycles.	£15,000.00	Part of development	Medium to Low
V11a	Snetterton Heath	Convert Gallows Hill (private road) to brideway. Provide shared use link to employment area 180m. Allow access through Richard Johnston ltd. Likely to require some form of link.		£90,000.00	Part of development	Part of development or medium
V11b	Snetterton Heath	New shared use link from Station Road/Hargham Road round existing dwellings to employment area. 280m. Allow access through Richard Johnston ltd. Likely to require some form of link.	This is a missing link. Either V8 and V10, V9 and V10 or V11 to be provided. Suitable for all cycles.	£130,000.00	Part of development	Part of development or medium

V12	Swangey Fen and Shropham	Turn into bridleway.	A surfaced link exists, but this is not a PROW nor highway. Suitable for most cycles.	£7,500.00	medium	Medium
V13a	Besthorpe, Wymondham College and Morley St Botolph	Provide footway between the existing footways on Norwich Road in verge. 1.2km. Cost provision on one side (northern most side) and on both sides.	No footway provided at the moment.	£720,000.00	medium	Medium to Low
V13b	Besthorpe, Wymondham College and Morley St Botolph	Consider making V13a shared use from the junction with the access onto the A11 to the junction with Mill Lane. Advisory or mandatory cycle lanes on Norwich Road between the two built up areas.	The part of Norwich Road that accesses onto and passes over the A11 is not that attractive to cycle along as it is the main access onto the A11 towards Norwich. Suitable for all cycles.	£180,000.00	medium	Medium to Low
V14	Little Ellingham and Stalland Common	Ensure surface is compact and suitable for cycling.	This route is a bridleway. Adequate surface for cycling at either end of the link. No surfacing proposed, could use the farm vehicle tracks. Suitable for most cycles.	£10,000.00	low	Medium to High
V15	Little Ellingham and Stalland Common	Convert to bridleway and consider providing a compact surface to cycle on. Could be changed to travel around fields	Travels through fields. Suitable for cycles with thick tyres	£7,500.00	low	Medium to High
V16	Little Ellingham and Stalland Common	Convert to bridleway and consider providing a compact surface to cycle on	Travels around fields. Suitable for cycles with thick tyres	£7,500.00	low	Medium to High
V17	Little Ellingham and Stalland Common	Convert to bridleway and consider providing a compact surface to cycle on	Footpath at Hingham Road end has been re-positioned. Travels around fields. Suitable for cycles with thick tyres	£7,500.00	low	Medium to High
V18	Little Ellingham and Stalland Common	Convert to bridleway and consider providing a compact surface to cycle on. Could be changed to travel around fields	Travels through fields. Suitable for cycles with thick tyres	£7,500.00	low	Medium to High
V19	Burgh Common and Bunn's Bank	Change level crossing barriers to cover the whole width of the road on both sides of the track.	Currently the barriers only block half the road.	£30,000.00	Part of development	Part of development
v20	Bunn's Bank and urban extension	Provision of new pedestrian and cycle bridge over the railway. Provision of surfaced, lit links within the recreation area in three directions, see T15	This could provide an ideal location for a bridge crossing of the railway for pedestrians and cyclists. There appears to be no amenity issues in terms of overlooking or shadowing. Potential issue could be the loss of open space in this area to surfaced and lit paths. There appears to be an electricity supply in the area as there are some flood lights present. Suitable for all cycles.	£343,500 (plus possession costs that could be 50% more)	Part of development	Part of development
V21	Bunn's Bank and urban extension	Direct, coherent, lit and obstacle free and barrier free shared use from new bridge to Bunn's Bank. 1.7km 2.5m wide with lighting.	To be provided as an integral part of the new development, will provide a convenient walking and cycling link to Bunn's Bank. Will have other links onto it as appropriate. Suitable for all cycles.	£800,000.00	Part of development	Part of development
Not on map	Signing of entire network with timings to destinations.	Signs at interchanges potentially on existing posts. A signing exercise would be required to determine the best locations and number of signs on existing posts. This would result in an accurate cost. Cost given is for individual signs, not lit, with or without pole. Signs could have time to distance or distance, or both.	New sign on new post = £250. New sign on existing post = £150. assume 90 signs.	Half on existing post and half on new post: £18,000.		

Appendix D - Schedule of Cycle Parking Improvements

Reference	Location	Recommendation	Detail	Cost	Priority	Likelihood of deliverability
P1	Police Station	3 Sheffield Stands outside the front of the police station for use by visitors. Cost to include with a shelter and without a shelter.	Discussions are ongoing regarding the potential to move the police station. This intervention could still be provided in the short term. The cycle stands would be on private land.	£300 - £2,300	Medium	Medium
P2	Post Office	5 Sheffield Stands outside the Post Office, located on the forecourt to the east of the Post Office. Cost to include with and without a shelter.	The location chosen will not impact on the operations of the Post Office as the space recommended appears to not be used. Could be private land.	£500 - £2,500	High	Medium
P3	Lloyds Bank	2 Sheffield Stands outside Lloyds Bank	There appears to be space for cycle parking outside Lloyds Bank.	£200.00	Medium	Medium
P4	Lidl	Provision of 5 Sheffield Stands outside Lidl, on the Queen's Road side of the building, with shelter.	The proposed area is currently an area of wood chips. A shelter could be fixed to the wall perhaps.	£2,500.00	High	Medium
P5	Main car park	Replace existing cycle parking in car park with 10 Sheffield Stands with shelter.	Whilst there are existing cycle stands, these are of a type that are difficult to use and have the potential to cause damage to the bicycle.	£4,000.00	High	High
P6a	High School	Improved provision of cycle parking at the High School	Potential to increase provision.Amount depends on site details.	£100 per Sheffield Stand. £2,000 for a five berth shelter	High	High
P6b	Infant School	Remove tyre grabber cycle parking (24no.) with 30 Sheffield Stands. Use existing shelter. Provide further 5 cycle stands for staff and visitors in a convenient location. Cost to include with and without a shelter.	Currently have 24 tyre grabber stands and no visitor or staff stands.	£4,000 - £6,500	High	Medium
P7	Junior School	Improved provision of cycle parking at the Junior School.	Potential to increase provision.Amount depends on site details.	£100 per Sheffield Stand. £2,000 for a five berth shelter	High	High
P8	Health Centre	4 Sheffield Stands near to the entrance to the Health Centre near to Connaught Hall. Cost to include with and without a shelter.	There are two potential locations for cycle parking. The first is near to the fence of the skate and play park where there is a redundant area of land within the car park which could provide a suitable location. The second is immediately to the south west of the building, in the single parking space. On private land.	£400 - £2,400	Medium	Medium
P9	Connaught Hall	5 Sheffield Stands with shelter outside the entrance to Connaught Hall.	These could be provided in one of the parking spaces immediately next to the entrance to the Hall to the south. On private land.	£2,500.00	Medium	High
P10	Station Road GP	5 Sheffield Stands outside the entrance to the Doctor's Surgery on Station Road, underneath the existing overhanging roof.	There are no cycle stands at the surgery. There is an existing space underneath the overhanging roof which would be ideal. On private land.	£500.00	Medium	Medium

Appendix E – Schedule of Crossing Improvements

Reference	Location	Recommendation	Details	Cost	Priority	Likelihood of deliverability
x1	Between Holly Court and St Edmunds over Surrogate Street	Zebra Crossing or PUFFIN	There are no crossings over Surrogate Street. One journey that this would benefit is for older people travelling between the two car homes.	£14,500.00	High	Medium
x2	Outside Library on Connaught Road	Zebra Crossing or PUFFIN	There are no crossings over Connaught Road. A crossing in this location would aid any journeys to the Library.	£13,000.00	Medium	Medium
x3	High Street.	Coloured surfacing or zebra	Whilst the build out crossings on Church Street seem to work (i.e. drivers stop to allow pedestrians to cross) this does not work on the High Street. By making the crossing more obvious with colouring or providing a zebra, drivers may stop more often. Note that zebra crossing could have affect traffic flow and that coloured surfacing requires much maintenance.	£40,000.00	High	Medium
x4						
x5	Over Station Road opposite Connaught Hall	Zebra Crossing or PUFFIN or Toucan with a link of Shared use on the west side	There are no crossings over Station Road. A crossing in this location could aid trips to the skate park, play park, health centre, GP and Connaught Hall as well as for the station.	£32,000.00	Medium	Medium
x6	Between Queen's Square and Aldi over Queen's Road.	Cyclable Zebra Crossing TOUCAN	This is an improtant desire line. This busy road does not have a crossing at the moment. See also T10.	£59,000.00	High	Medium

Appendix F - What Local Residents Said

A.2 THE LOCAL CYCLIST

On 30 August a meeting was held with a local cyclist, Christine Beales.

- Connaught Road could benefit from a cycle lane.
- Clarify right of way on Station Road shared use – cyclists or vehicles emerging from accesses?
- 'Cycle friendly town' signs
- Issues at Connaught Road/Exchange Street junction – one way could cause confusion for cyclists who are used to two way roads.
- Cycle parking could be provided at the Post Office, Lloyds Bank, Surgeries and Queen's Square.
- Drivers need to be more considerate.
- Bikes on trains – cannot move bikes between platforms at Wymondham.
- Paper boys do not have lights or safety equipment.
- Spares and bike maintenance an issue.
- Fun family event on bikes.
- Leisure cycle routes.

A.3 MOBILITY

On 30 August, some residents of Hollycourt were met regarding the issues they encounter when going around the town.

- More benches: Blackthorn Road, London Road near the Police Station, Opposite Salters Field, Mill Road, Gaymer's Meadow.
- Surrogate Street crossing needed as doctors on Station Road. Difficult to cross. Concern re speed from Norwich Road. Concern re speed of traffic into Thieves Lane. There is a pedestrian refuge but it is difficult to cross and involves looking quite far over right shoulder.
- Connaught Plain/Exchange Street – some lgvs and hgvs have extended mirrors. With narrow pavements, pedestrians could be clipped.
- Parking on footway on Exchange Street – footway already narrow. Weight of HGV depressing slabs causing trip hazard.
- Recently the maintenance company highlighted with yellow spray paint the areas that need repairing which helped the partially sighted residents avoid these hazards.
- Barriers on Connaught Road/Exchange Street are often damaged as this is a tight corner. It is the HGVs turning right onto Exchange Street that cause this.
- A Boards and produce outside shops narrows footways.
- Deliveries – vans park on footways when unloading.
- Uneven path in the church grounds.
- Parking on Connaught Road – car park behind Library not really used.
- Hollycourt path to Library – poor surfacing and poorly maintained.
- Myhills – goods outside cause obstructions.
- Church Street and Exchange Street – mix of drivers letting people cross or not.
- Near to War Memorial, vehicles start to accelerate.
- Re buses – Konnect are excellent whereas First are not as good and not as courteous.
- Barriers by M and Co are difficult for motorised buggies to traverse and the path is uneven.
- Outside Barclays Bank, parked cars overhang footway and narrow it.
- Crossing car park entrance to Barclays Bank a concern

- Exit and Entrance of Sainsbury's needs emphasising to motor vehicles. No entrance into Queen's Square, east access also needs highlighting better.
- Crossing Station Road between platforms an issue.
- Crossing Connaught Road an issue.

A.4 CAR SHARING AND GENERAL COMMENTS

On 30 August a meeting was held with Ali Clabburn who runs Lift Share.

- Liftshare also includes Walk, Taxi and Bike Buddi.
- Liftshare is not greatly promoted in Norfolk.
- Potential to set up an Attleborough Liftshare group which would cost £500 per annum plus extra fee if Liftshare involved further. This enables monitoring.
- MPTP.co.uk – personal travel plan on line. Compares time and costs (including insurance, wear and tare and fuel) of different modes of transport. Information provided in an email. Can be sent on bulk – for example the HR team should enter email address, postcode and start times and the personal travel plan is emailed to staff. The information provided is specific to that person. It is licence of credit based. One credit = one PTP delivered = £5. Cost reduces if more participating. Much cheaper than manual way of producing a PTP. The data can be used to see what changes need to be made – e.g. if there is a demand for a bus service not currently provided.
- Van share – small freight in particular. Shipley is an example.
- Broadband is essential in keeping businesses in the town
- Besthorpe, north of A11, no convenient bus stop – bridge over the A11 from Besthorpe has no footway.
- Park and share? On way to Norwich near A11 junction.
- Footpath along north of the A11 in need of improvement.
- Move railway further south and infill with houses. Make it a cycle track. No need for bridges.
- Link Road may remove HGVs but not cars. Cars are the issue – more cars, more houses.
- Cycle town with cycle priority. Gent had a clear vision – make cycling more attractive.
- Rat runs on small lanes – concern when houses developed.

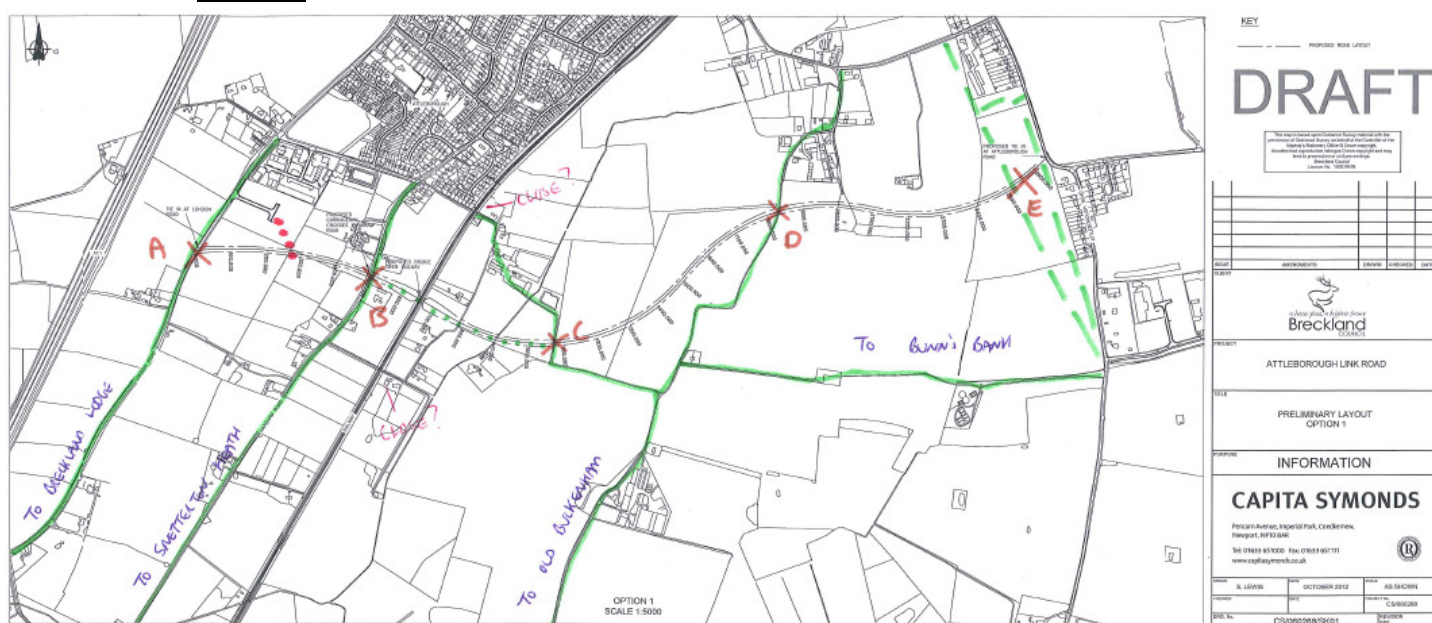
Appendix G – Smarter Choices and the Link Road

G.1 Introduction

The following are comments on the three link road options proposed, from a Smarter Choices stand point. In the main, the effect of the link road on the identified walking and cycling route to/from surrounding villages and employment areas are assessed, although certain provisions to consider as the link road is developed are also discussed.

It should be noted that the walking and cycling network as shown, follows existing roads. It is expected that there will be new roads and new links which will form the network and will link onto the town and village and employment links.

G.2 Option 1



G.2.1 Junction A – junction with London Road.

Breckland Lodge could be an attraction for Attleborough residents as it is a pub and a restaurant. The most direct route from Attleborough is along London Road. Details of the junction type of the link road and London Road are not provided. Note that this might not be a popular destination to warrant a shared use path from Attleborough to Breckland Lodge. However, if a shared use was provided, this could be on either side of London Road. If to the east, appropriate arrangements to cater for pedestrians and cyclists should be incorporated at this junction.

G.2.2 Junction B – Junction with Hargham Road

Going by the text provided, it seems that the link road will have priority over Hargham Road which could have a bus gate on the southern junction with the link road. This will have a severance effect on the cycling route to Snetterton Heath. It is recommended that the Link Road team consider how cyclists will be able to cross at this point (to continue their journey along Hargham Road, north or south), be it with some shared use links and a refuge for example, or a Toucan (although, as the text states, this could cause frustration to the drivers who are using the route for its lack of interruptions).

It could be that there is access onto Hargham Road north from the link road. As such, a refuge on the desire line for cyclists who are continuing to the employment areas should be provided

G.2.3 Link Road A to B

This section of the link road passes close to the employment allocation that is yet to be built out (Victory Park). There could be potential for a shared use link from the service road, in between future buildings, to the Link Road. This would enable residents in the Urban Extension to the south of the town to access the employment area.

A shared use path could be provided on the north side of the link road.

G.2.4 Junction C – Junction with the Private Road off Fowlers Lane

As the route stands at the moment, the link road will sever this route to Old Buckenham. However, this cycling route relies on access through a working farm (see Vxxx) as well as crossing the level crossing at grade.

It seems that link road section B to C could be used by cyclists rather than the route described previously. Provision for cyclists at junction C will need to be made and could include short shared use links off the road and a pedestrian refuge. Cyclists will also have to cycle over the bridge. A shared use path would be required on the northern side of the link road which will link in with link A to B.

As an aside and not directly related to Smarter Choices, this option could see links onto it from the private road that serves the houses that rely on the two level crossings, which could potentially be closed.

G.2.5 Junction D – junction with Leys Lane

This is on the route to Old Buckenham. The link road will no doubt have priority. As such, shared use links with a refuge would assist cyclists in their journey.

G.2.6 Link C to D

A shared use path on the north side of the link road could have its benefits to cyclists.

G.2.7 Junction E

An indicative new shared use route through the urban extension, linking to near to Bunn's Bank is highlighted on the villages and employment areas walking and cycling network. The link road will sever this. An adequate crossing, perhaps in the form of a pedestrian refuge or TOUCAN (not withstanding the frustration issue) could be provided here.

G.2.8 Link D to E

Again, a shared use path on the north side of the link road could be useful.

G.3 **Option 2**

G.3.1 Junction A – junction with London Road.

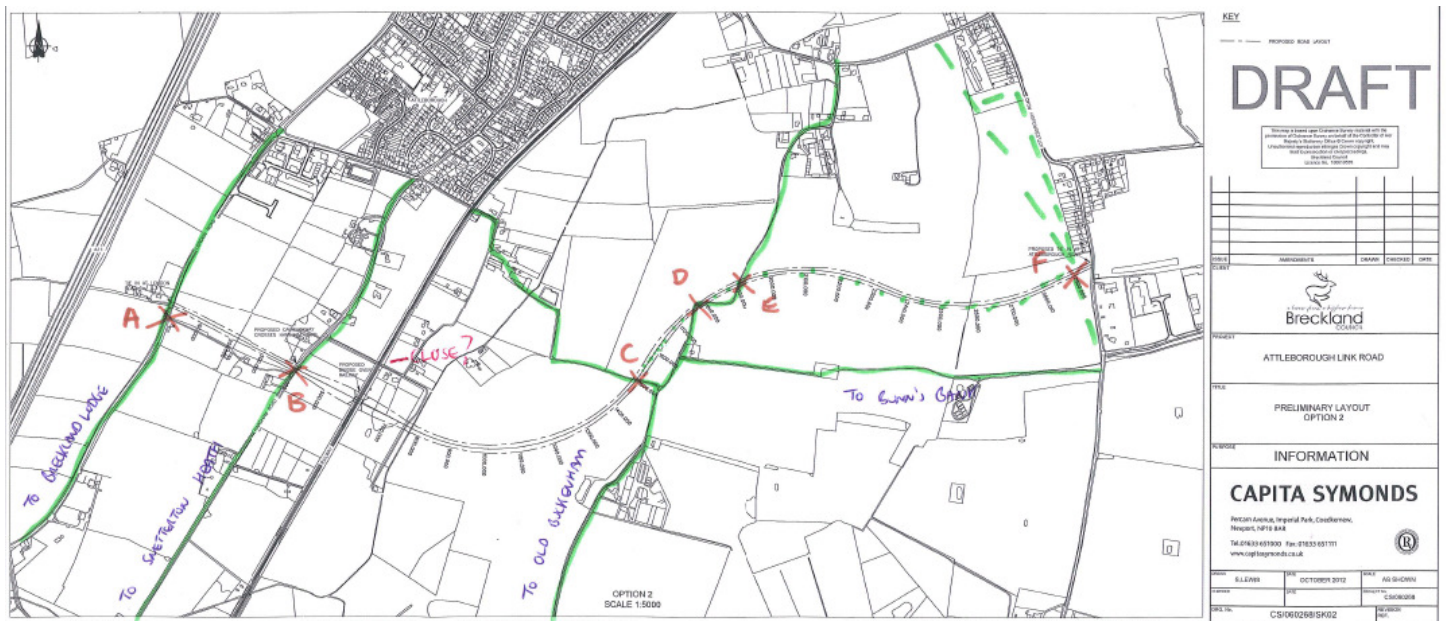
As per option 1.

G.3.2 Junction B

As per option 1.

G.3.3 Link A to B

A shared use path could be provided on the north of this link.



G.3.4 Junction C

It is likely that the link road will have priority at this junction. As such, shared use links with a refuge would assist cyclists in their journey.

G.3.5 Link B to C

For continuity, a shared use path on the north side could be provided.

As an aside and not directly related to Smarter Choices, this option could see the level crossing nearest to the bridge closed, and a suitable link on to the link road provided.

G.3.6 Junction D and E

It could be that the existing road is realigned, but it is unlikely to continue in its current direction and cross the link road twice. At junction E, cyclists can head north on xxx or continue along the link road to junction F. Shared use links with a refuge would assist cyclists in their journey

G.3.7 Link C to D/E

It could be that the cycling route is diverted onto the link road at junction C or D. Shared use links with a refuge would assist cyclists in their journey. Between C and D/E a shared use on the north of the link road could be provided.

G.3.8 Link D/E to F

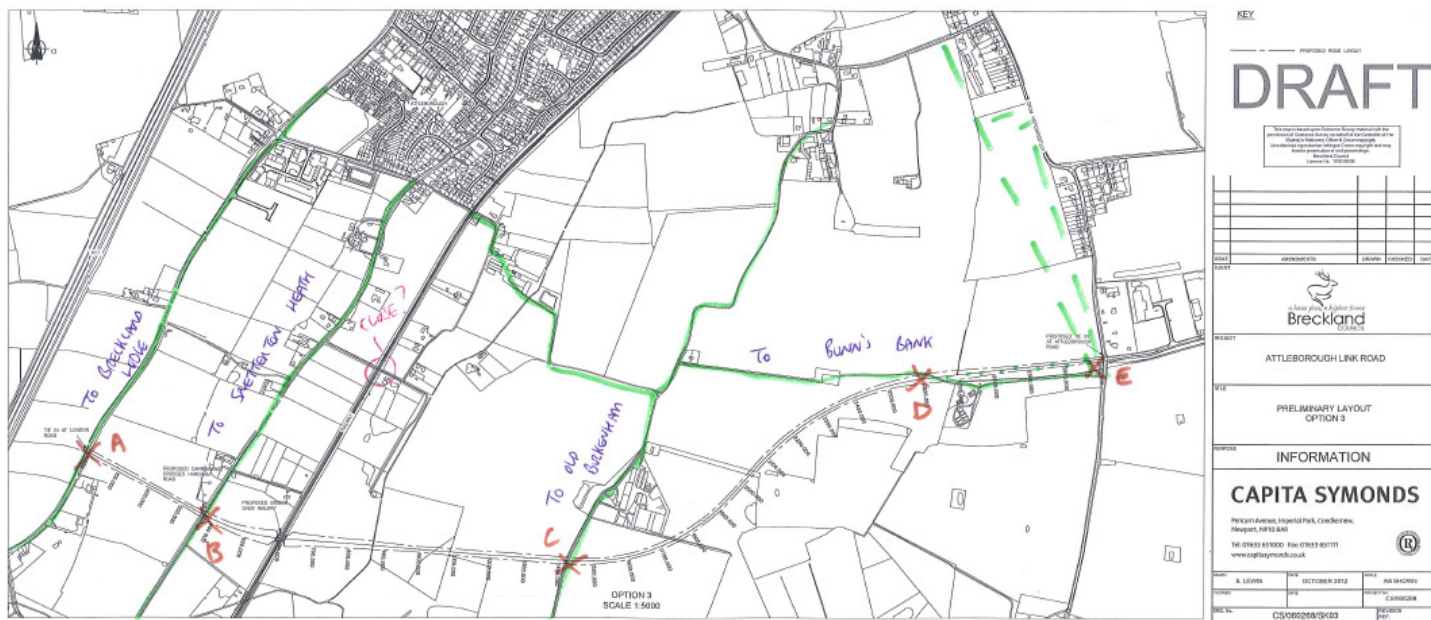
A shared use on the north side of the link road could provide access to Bunn’s Bank, rather than using the farm track that is currently shown as the route.

G.3.9 Junction F

An indicative new shared use route through the urban extension, linking to near to Bunn’s Bank is highlighted on the villages and employment areas walking and cycling network. The link road will sever

this. An adequate crossing, perhaps in the form of a pedestrian refuge or TOUCAN (notwithstanding the frustration issue) could be provided here. A shared use link is then provided to continue the journey to Bunn's Bank.

G.4 Option 3



G.4.1 Junction A
As per option 1 and 2.

G.4.2 Junction B
As per option 1

G.4.3 Link A to B
As per option 2.

G.4.4 Junction C
It is likely that the link road will have priority at this junction. As such, shared use links with a refuge would assist cyclists in their journey.

G.4.5 Link B to C to D
For continuity, a shared use path on the north side could be provided.

G.4.6 Junction D
The route identified in the walking and cycling network for villages and employment is a farm track, rather than a highway road. However, a route at the junction to the west would be more direct than C to D.

G.4.7 Junction E
This could be where the indicative route through the urban extension joins the Attleborough/Old Buckenham Road. It is not understood what form the junction would take. Provision for cyclists (and perhaps pedestrian) crossings should be considered, linked by shared uses on either side.

G.4.8 Link D to E

The eastern segment follows the farm track/walking and cycling route closely, so a shared use path to the north of the link road would be preferable.

G.5 **General**

- Any junctions at the link road and urban extension roads that feed onto the link road should have pedestrian/cycle refuges and appropriate links onto the shared use path to the north of the link road.
- If any junctions are signalised, appropriate arrangements for cyclists (and potentially pedestrians) should be provided. Furthermore, bus priority measures should be included, perhaps through technology rather than road space.
- Where the route becomes an integral part of the development, advisory or mandatory cycle lanes or shared use paths could be provided. Cycle lanes require a certain width of road.
- With regards to the Snetterton Heath Shuttle Bus, the least favoured option sees the bus using Hargham Road as this relies on a new link being provided into Snetterton Heath to make it as direct as using the A11. As such, this severance does not have an impact on the preferred Snetterton Heath Shuttle Bus.
- Signage would be required at the junctions of the particular route and the link road., in the same format as the rest of the network.

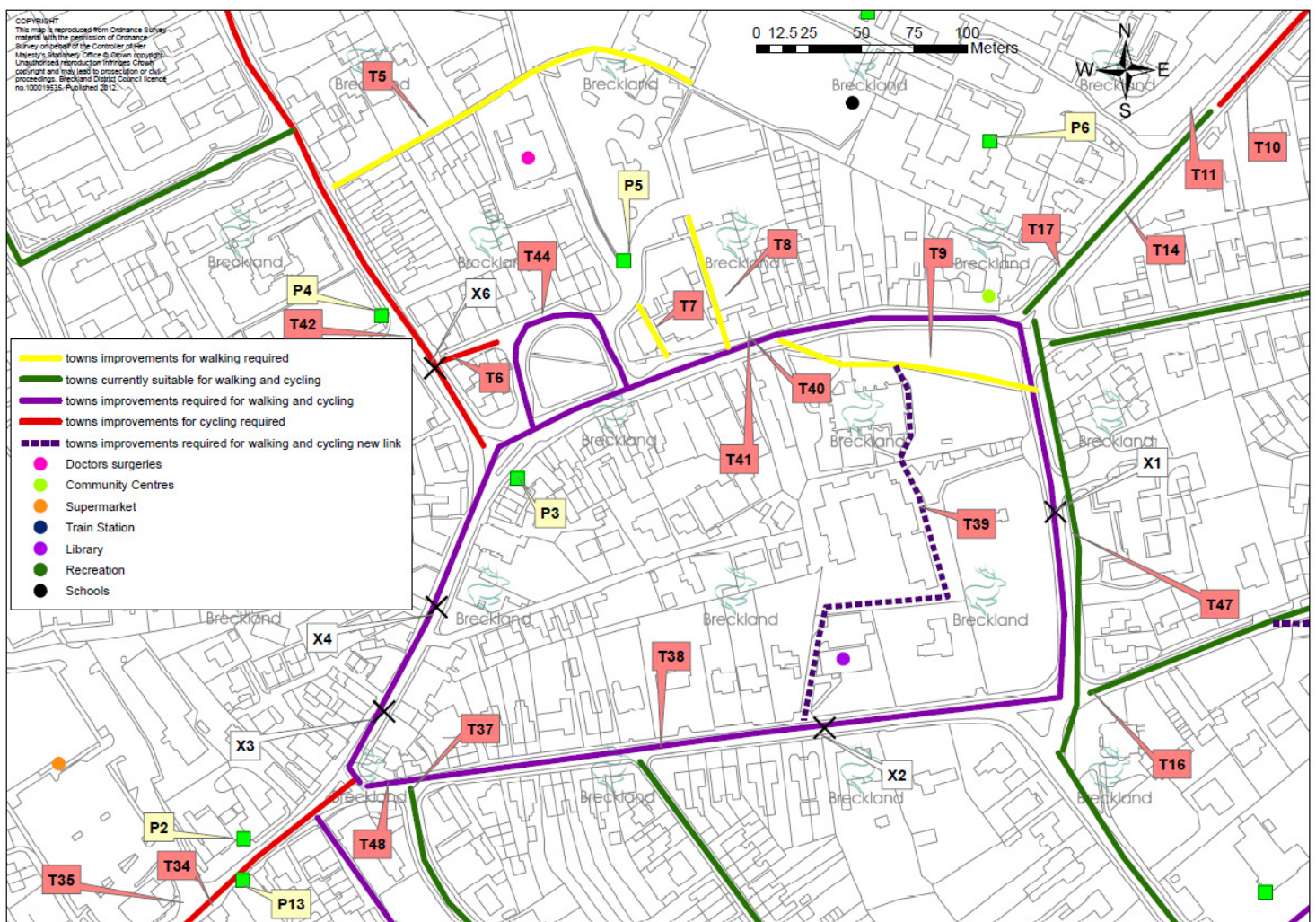
Appendix H – Smarter Choices and the Town Centre.

A.5 INTRODUCTION

A.5.1 As part of the Smarter Choices work, some individual potential interventions were identified for the town centre. Rather than being stand along projects, these could be considered as part of the whole package for the town centre. Indeed, it is acknowledged that certain individual interventions might be made redundant as result of the town centre package.

A.6 TOWN CENTRE WALKING AND CYCLING INTERVENTIONS

A.6.1 The proposed interventions are shown on the following map. The reference numbers refer to interventions as listed at appendix [x, y, z](#)



A.6.2 The following Smarter Choices principles should be considered as the town centre scheme is worked up:

- Currently, two lanes of one way traffic cause confusion for cyclists with regard to where they should place themselves.

- Cyclists wish to travel contrary to the flow of one way traffic. This often sees cyclists cycling on the footway. The ideal situation would be for cyclists to be allowed to cycle in both directions along each route legally, be it through wider footways or perhaps cycle contraflows.
- Some areas of the town have poor surfacing which can cause issues for partially sighted and those who are less mobile. Whilst some specific areas have been identified, as the scheme is designed, any surfacing should not cause trip hazards.
- Whilst specific crossing areas exist in the town and some further provision has been provided, it is likely that not all the desire lines will be catered for, especially in an area where there are attractions on either side of the road. Whilst not suggesting pedestrians are prevented from doing this, this behaviour of pedestrians should be considered as the scheme is progressed.
- Whilst specific areas for cycle parking have been highlighted on the above map, this is not exhaustive. It would be beneficial to cyclists if Sheffield Stands were at numerous convenient locations throughout the town, spread out, rather than one large area.
- Local residents were asked to identify any issues in the town. Their responses are at appendix x. One key issue is the width of the footways around certain parts of the town. Linked to this is the potential for some external shop displays and advertising boards to narrow the footway further, causing further inconvenience. The town centre scheme should ensure that adequately wide footways are provided.
- Crossings in the town centre will need to strike a balance regarding impact on conservation area, convenience for pedestrians and too much inconvenience for motorists.
- A general declutter would benefit the townscape but also remove unnecessary obstacles that may inconvenience pedestrians.
- There appear to be few benches in the area as well as few places of public realm for shoppers to sit and perhaps eat or meet. The obvious one is the central green area, but any opportunities to provide benches or other areas of public realm could be taken.
- Deliveries not only impact the flow of traffic, but also impact pedestrians as HGVs and LGVs often park on the footway, thus narrowing and blocking pedestrian routes.
- Wide visibility splays see pedestrians who cross the road to continue their journey in the middle of the road for longer than tighter splays. They also attract motorists to maintain their speed rather than slowing down.
- Dropped kerbs and tactile paving. The town centre scheme should ensure these are provided as per guidance. In some instances in the town at the moment, there is poor drainage at areas where dropped kerbs are provided.

A.7 TOWN CENTRE BUS INTERVENTIONS

- If any traffic signals are proposed, there should be bus priority through technology as opposed to road space.
- If priorities of the gyratory are change (for example a road becomes two way, or is pedestrianised) the impact on the existing and future services discussed in the Smarter Choices report needs to be taken into account. For example there could be benefits to through routes being removed from Church Street, although a suitable location for a stop near to Church Street junction should be considered.
- With regards to a bus interchange, the following high level assessment has been made and could inform the town centre work:

Potential option	Initial discussion
The Main Town Centre car park	<ul style="list-style-type: none"> • In the town centre, near to destinations. • Would result in loss of car parking spaces. • Potential conflict with pedestrians leaving and accessing cars. • Conflict on Market Days. • Requires a diversion off the bus's route. • Likely to require a turning manoeuvre in the car park. • Could remove obstacles to the flow of traffic from Church Street.
Using the road that arcs	<ul style="list-style-type: none"> • In the town centre, near to destinations.

around Queen's Square	<ul style="list-style-type: none"> • Would result in the loss of on street car parking spaces. • Potential conflict with pedestrians accessing car park or services in this area. Also at the junctions with Church Street. • Diversion off the route is not significant. • Could aid traffic flow along Church Street. • Could remove obstacles to the flow of traffic from Church Street.
Connaught Plain – bus laybys.	<ul style="list-style-type: none"> • In the town centre, but not immediately near destinations. • A two lane road that could accommodate on street bays. • Potential ease in re-entering traffic. • Minimal, if any, conflict with pedestrians. • Could remove obstacles to the flow of traffic from Church Street. • Would still likely result in buses going along Church Street and stopping where they do now, although fewer in number.
Train Station	<ul style="list-style-type: none"> • Not in the town centre. • Would still likely result in buses going along Church Street and stopping where they do now. • Could remove obstacles to the flow of traffic from Church Street. • Obvious area is outside the Railway Station buildings which has limited land and would result in potentially complicated turning manoeuvres. • Would see the Railway Station served by many buses.
Church Street	<ul style="list-style-type: none"> • Could require extension to the bus laybys. Potentially reduce number of on street car parks. • In the town centre, near to destinations. • Already accepted as the location of the main bus stop in the town. • Could cause obstacles to flow of traffic. • Could conflict with pedestrians and cause an oppressive environment.