

# Strategic Cycle Routes for Sandbach

**VERSION 3** 



For incorporation in Cheshire East Local Transport Plan Refresh 2018

#### **Contents:**

#### **Executive Summary**

- 1. Introduction
- 1.1 Cheshire East Cycling Strategy
- 1.2 Local Transport Plan
- 1.3 Cycling and Walking Investment Strategy
- **1.4 SMOTS**
- 2. Methodology
- **2.1 HEAT**
- 2.2 Scheme Appraisal Tool
- 2.3 Level of Service Tool
- 3. Project Area
- 4.Baseline Data Analysis
- 4.1 Deprivation
- 4.2 Health
- 4.3 Employment
- 4.4 Travel to Work
- 4.4.1 Travel to Work by Car
- 4.4.2 Travel to Work by Train
- 4.4.3 Travel to Work by Bicycle
- 4.5 Air Quality
- 4.6 Population Growth
- 4.7 Travel to Education
- 4.8 Recreational
- 4.9 Propensity to Cycle Tool
- 5. Strategic Routes
- 5.1 to 5.5 Strategic Routes 1 to 5 Synopsis
- 5.6 Cohesive Strategic Route Planning
- 6. The Case for Investment
- 7. Route Summaries
- 7.1 to 7.5 Strategic Routes 1 to 5 Synopsis (includes case study for Sandbach Railway Station 7.1.7)

# **Executive Summary**

The Sandbach Town Cycling Plan was approved by Sandbach Town Council Planning & Consultations Committee in February 2018. The Plan proposes a number of improvements for cycling provision. This report selects five priority schemes from the Town Cycling Plan, and seeks to support their inclusion in the Cheshire East Local Transport Plan by means of quantitative statistical evidence, all of which is available on the public domain. The Cheshire East Cycling Strategy is referred to throughout, and its aims and objectives are closely followed throughout.

This report is prepared by the Sandbach Town Council Cycling Working Group, which was set up by Sandbach Town Council primarily to produce the Town Cycling Plan, and to support the Local Transport Plan. The Working Group consists entirely of volunteers, so does not have access to consultancy resource available to other, larger, towns in the region. As a consequence, the report will be concentrated on the presentation of evidence supporting the key objectives.

This is balanced by the fact that the Sandbach Cycling Working Group is composed of local people with a detailed knowledge of not only the physical geography of Sandbach, but also the needs of the town, in terms of travel between homes, schools and places of work.

The key objectives are to prioritise safe, quiet and direct cycle access to and from Sandbach Railway Station, schools (the aspirations of CEC in relation to SMOTS are acknowledged and supported), employment areas and the town centre. It is also opportune, in the face of an increase in housing provision for Sandbach of over 40%, to ensure that new developments incorporate measures to prioritise walking and cycling.

This document is aimed at those people who are on the verge of considering cycling as a primary means of transport to commute to school or work, or as a general means of transport for shopping, visiting or recreation. The objective is to persuade these people that they would choose cycling if it could be made to feel safer and more convenient for them to do so.

Chris Boardman, the Olympic gold medal winning cyclist lists his priorities: 1. Walk. 2. Cycle in normal clothes to go to work or school and do your shopping. 3. Use your bike for family sightseeing trips. A (very) distant fourth is the Lycra clad weekend warrior.

#### 1. Introduction

This Report will describe how improvements can be made so as to optimise cycling provision across the five selected schemes. In order to do so, it is first necessary to describe the methodology, the geographical area to which the report applies, and to examine baseline data analysis – that is to say, an analysis of the data that forms the backdrop to the business cases behind the strategic routes. These elements are covered in sections 2, 3 and 4.

The report will then go on to describe the strategic routes against this background, followed by a review of the case for investment, before describing the routes in detail, including a list of interventions that would be required to achieve the objective. In preparing this report, a number of government strategies and publications have been considered and acknowledged and this report can be seen as existing in symbiosis with these policies. Foremost among these are the following:

# 1.1 Cheshire East Cycling Strategy

This report embraces and is fully aligned with the objectives of the Cheshire East Cycling Strategy 2017-2027. The key targets within the Strategy described in Section 9 are:

Cycle Journeys- double the number of people cycling once per week for any journey purpose in Cheshire East by 2027 from a 2014 baseline

Public Perception – Improve public perception of cycling within the district by ensuring that annually measured Cheshire East Council satisfaction scores are improving over time.

Section 5 of the Cycling Strategy promotes a cycle friendly environment with five main requirements:

- Cohesion
- Directness
- Safety
- Comfort
- Attractiveness

This report embraces all five of these requirements, quantified in Section 6, and, in accordance with terms of reference identified in the Propensity to Cycle Tool (see Section 4) concentrates on a combination of safer, quieter routes

This report aims to demonstrate that Sandbach is a prime location for investment in cycling provision, and not only can these targets be achieved, but exceeded.

## 1.2 Local Transport Plan

The Local Transport Plan is underpinned by the Cheshire East Cycling Strategy, which, by extension, is supported by this report.

Key Policies in the Local Transport Plan are:

Policy S8 Cycling: Work with Stakeholders to improve facilities for cycling so that it is attractive for shorter journeys.

Policy H2: promotion of Active Travel and Healthy Activities. Work in partnership to promote walking cycling and horse riding as active transport options and healthy activities.

# 1.3 Cycling and Walking Investment Strategy

This is a DfT (draft) publication that sets out the strategy for long term transformational change, aiming for a scenario whereby walking and cycling are the natural choice for shorter journeys. It also identifies a new "Access" fund, which is a key funding source for sustainable travel.

# 1.4 Sustainable modes of travel strategy (SMOTS)

This is direct transcript from the Cheshire East Website:

"Travel to schools within Cheshire East is an essential aspect of daily life. The Council is working to promote more physical activity, improve our environment and create safer and more vibrant communities. This approach is underpinned by the council's corporate objectives and our commitment to improve quality of place.

Local authorities are under a statutory duty under the Education Act 1996 to promote the use of sustainable travel and transport to and from institutions where education or training is delivered. The duty applies to children and young people of compulsory school age (5-16) who travel to receive education or training in the Local Authority's area.

National research shows that developing more sustainable alternatives to the use of the single occupancy car for home to school transport provides benefits to the environment and to children's and young people's well-being, including improved fitness, road safety skills and an increased sense of independence."

# 2. Methodology

The methodology is aligned to "Methodology Guide: Creating a Town Cycling Plan" published by Cheshire East County Council. In essence, there are six steps:

- 1. Agree Scope
- 2. Information Gathering and Stakeholder Engagement
- 3. Network Planning Agree Routes
- 4. Network Planning Identify Potential Schemes
- 5. Scheme Appraisal and Prioritization
- 6. Reporting

The methodology embraces an analytical approach, using publicly available data derived from, for example, the 2011 census, such as Propensity to Cycle Tool, Datashine, and other sources available via Cheshire East Council (e.g. Air Quality data) and Office of Road and Rail Regulator. This will be combined with local knowledge of the "desire lines," pinch points, and potential solutions.

The study area in scope will essentially be those identified as zones CE030, CE031 and CE032 as listed in the Propensity to Cycle Tool.

A considerable amount of information gathering has already taken place in the development of the Town Cycling Plan, and this report will be informed by such, in addition to the data obtained as noted above. Local representative bodies have been consulted, such as the Sandbach Footpath Group, and the Sandbach Woodland and Wildlife Group, and two of the schemes have been developed and modified as a result of engagement with these bodies.

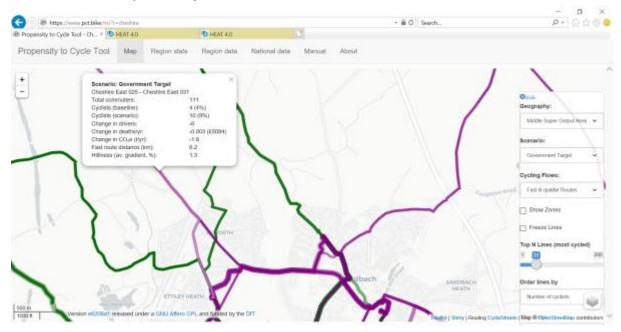
The Sandbach Town Cycling Plan describes a number of potential schemes, some of which, whilst undoubtedly beneficial (for example, a safe, quiet route to enable cycle travel between Sandbach and Congleton) are at this stage aspirations worth considering in the future. A number of the proposals are desirable but fairly minor and may be approached from a different direction – for example where there is a safety prerogative. There are other schemes that may yet be eligible for s106 funding, for example., the Abbeyfields Phase 2 development. From the Town Cycling Plan, and following meetings with Cheshire East Transport Planning representatives, five potential schemes have been identified, which form the main focus of this report. These are described in Section 5 and detailed in Section 7.

# 2.1 Health Economic Assessment Tool (HEAT) for Cycling

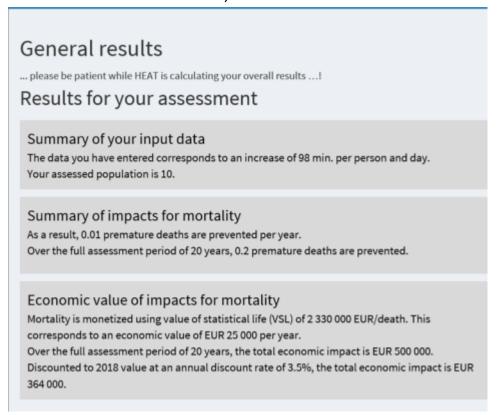
HEAT is an online tool developed to assess the value of reduced mortality that results from regular walking or cycling. The website address is <a href="https://www.heatwalkingcycling.org">www.heatwalkingcycling.org</a>. The HEAT tool calculates this value by comparing increase in cycling based upon the achievement of government target by comparison to 2011 census figures. Input data for this is obtained from the Propensity to Cycle Tool, which is described in 4.9 below. This is carried out for three of the routes – the main arterial routes Middlewich Road, Crewe Road and Congleton Road. No data exists on PCT for the Cookesmere Lane Link (Strategic Route 2), which is a semi-rural route, or for the Capricorn Development (Route 4), which was not included in the 2011 census.

Input data from PCT is "No of Cyclists (Baseline)" and "No of Cyclists (scenario)." The screenshot from PCT below is for Middlewich Road, the results

#### are 4 and 10 respectively.

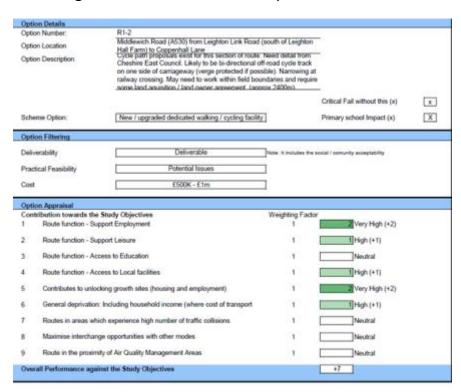


These figures are used in the HEAT calculation, input along with parameters such as average cycling speed, (14 kph). distance per trip (5.7km), value of statistical life in euro (£2,328,615). The results are displayed as per screenshot below. For Middlewich Road, the total economic value is EUR 364,000.



# 2.2 Scheme Appraisal Tool

The Scheme Appraisal Tool is used to categorize and score each route following a set of criteria. An example is shown below.



Nine criteria are assessed for each route. Each criterion is scored between -2 and +2, whereby -2 represents a very negative impact and +2 a very positive impact.

The scoring for each route is provided in Section 7 – Route Summaries.

# 2.3 Level of Service Tool – Cycle Route Audit

The Level of Service Tool is described in detail in Appendix A "Cycle Route Audit Tool – Guidance Notes"

The Level of Service Tool is a table that sets out five Key Requirements - Cohesion, Directness, Safety, Comfort and Attractiveness, against which performance criteria are measured, taking into consideration key factors and design principles. Scoring is against 25 indicators attracting a score of 0, 1 or 2, depending on whether the appropriate criterion is met to achieve the score.

Scores are reported for each route against both existing and proposed routes.

The results accruing from the implementation of the tool are reported in Section 6.

# 3. Project Area

The Scope is delineated by Zones CE030, CE031 and CE032, indicated on the extract from Propensity to Cycle Tool (PCT), below. These zones are sufficient to allow analysis of the selected schemes, and, because the zones are nominated by PCT, conveniently map across to aid analysis. Also shown are direction of travel for neighbouring towns Middlewich, Congleton, Alsager and Crewe.

An indication of cycle routes in place as at the time of the 2011 census is also shown. Fast routes are shown as purple lines, quiet routes in green. Whilst not an absolute predicator, quiet routes are thought to be safer. At this point it is notable that fast routes predominate. In order to encourage cycling, an aspiration should be to make the more direct routes safer and quieter.



# 4. Baseline Data Analysis

This section sets out the current position in relation to Housing Growth, Deprivation, Health, Employment, Travel to Work, Travel to Education, Planned Development and Infrastructure, and finally, Propensity to Cycle Tool (PCT). It should be borne in mind that a substantial amount of the data is taken from the 2011 census, although where possible, more recent data has been sourced in order to provide more accurate analysis. The sources of information are noted in each case.

This data provides a baseline that allows comparisons with other zones and against which improvements can be measured. In terms of Income and Health Deprivation, the only information available is that provided by the 2011 census, so all that can be provided is an indication of the status at that time.

There is a broad basis of similarity between Sandbach and Nantwich, so there is a case for mapping or extrapolating trends for Income and Health statistics by using the Crewe and Nantwich Cycling Delivery Plan, which was prepared by a professional consultancy. Such expertise is beyond the budget of Sandbach Cycling Working Group.

# 4.1 Deprivation

The extract from Datashine (<a href="http://datashine.org.uk/">http://datashine.org.uk/</a>) below, provides an indicator of status of deprivation across the town. An area of deprivation is indicated close to the town centre. This data is not in itself a factor in deciding upon investment in cycling infrastructure. It can only be It can be used to benchmark Sandbach's status relative to other towns in Cheshire East.



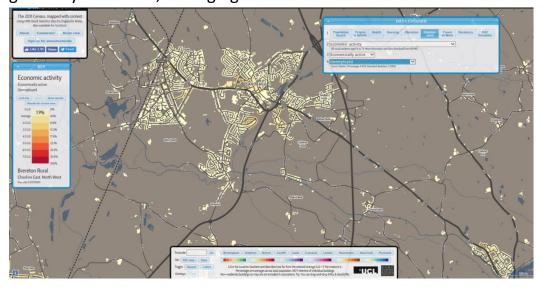
#### 4.2 Health

The extract from Datashine (<a href="http://datashine.org.uk/">http://datashine.org.uk/</a>) below, provides an indicator of status of health across the town. Generally good health is evident to the west of Sandbach (Elworth and Ettiley Heath) with worsening conditions to the north of the town centre, and also heading south in the Union Street/First/Second/Third Avenue areas. This is merely an indicator of the situation at 2011 census. No current statistics are available. Whilst the health benefits of cycling are clear, there is no quantitative extrapolation available to demonstrate this.



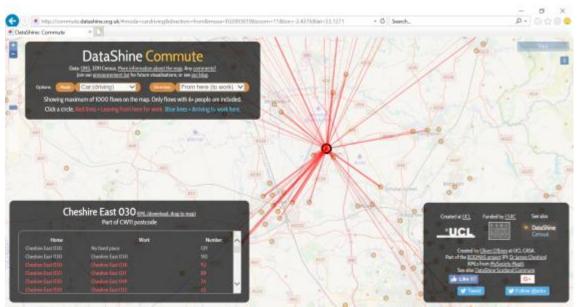
# **4.3 Employment**

Another extract from Datashine, below, provides an indicator of status of unemployment across the town. Unemployment level is relatively low, generally below 4%, averaging at 1.9%.



#### 4.4 Travel to Work

http://commute.datashine.org.uk/ is a website widely used by transport professionals, using data obtained from the 2011 census. The website arranges data by zones within each town. It will be used here to assess modes of travel to work from the three Sandbach zones - CE030, CE031 and CE032. Three modes of travel will be examined: Car (driving), Train and Cycling. Car and train travel are selected because two primary objectives are (a) to persuade people to cycle instead of driving short journeys, and (b) persuade people to cycle to the railway station instead of driving, in order to complete their commute by rail. The website also identifies the destination of travel. A sample screenshot is shown below, for the number of people who drive to work, from CE031 (Ettiley Heath and Elworth). The website provides a graphical indication of direction of travel, and in this case, it is clear that Crewe and Crewe Green predominate. Crewe Green is 5 to 6 miles from Sandbach Railway Station (approximate centre of CE032). The black box to the lower left hand side displays the data used to create the graphic. Data extracted from this box for each iteration is used to populate the table below.



## 4.4.1 Travel To Work By Car

The table below indicates work destination of census respondents travelling from each of the three Sandbach Zones, using the Commute. Datashine information as noted above.

Travel by Car Work Destination	· ·	Ettiley Heath & Elworth	Sandbach Heath	Crewe	Crewe	Middlewich & Holmes Chapel	Congleton	Scholar Green	Nantwich	Manchester	Other Cheshire East	Other	
Distance	Les	s Than 3 m	niles	Less Tha	Less Than 6 miles 6 miles and Over								
Journey From	CE030	CE031		CE035,038,0 41		CE023,024, 025	CE026-028	CE033	CE049				
CE030 Sandbach North	110	89	65	125	218	88	28		74	30	188	162	1177
CE031 Ettiley Heath & Elworth	110	165	106	224	294	126	34		105	28	246	211	1649
CE032 Sandbach Heath	73	93	83	136	177	74	60	64	53	12	216	55	1096
Totals	293	347			689		122	64	232	70	650		
			894		1174							1854	3922

This gives us the following information, relevant to this report:

894 out of 3922 car journeys are 3 miles or less.

1174 out of 3922 car journeys are 6 miles or less.

338 out of 894 car journeys within Sandbach start and finish within the same zone.

#### 4.4.2 Travel to Work By Train

Data from Datashine in relation to travel to work by train offers the following information.

Travel by Train Work Destination	Crewe	Crewe	Manchester	No Fixed Place	
Journey From	CE035,038,0 41	CE036-048			
CE030 Sandbach North	0	o	14	11	25
CE031 Ettiley Heath & Elworth	14	6	23	8	51
CE032 Sandbach Heath	0	0	0	6	6
Totals	14	6	37	25	82

Whilst these figures may appear to be on the low side in terms of passenger numbers, it clearly shows that Manchester is a popular destination. In order to arrive at a more reliable assessment, the website for the Office of Rail and Road is a useful source of information, figures for station usage are provided for each year. The web address is: <a href="http://orr.gov.uk/statistics/published-stats/station-usage-estimates">http://orr.gov.uk/statistics/published-stats/station-usage-estimates</a>

The table below is a direct download from this website.

Station Name	Constituency	1617 Entries & Exits	1516 Entries & Exits
	<b>.</b> T.	▼	<b>v</b>
Alsager	Congleton	111,016	101,794
Congleton	Congleton	347,208	313,290
Crewe	Crewe and Nantwich	3,085,604	2,843,396
Goostrey	Congleton	50,892	42,852
Holmes Chapel	Congleton	199,748	173,738
Nantwich	Crewe and Nantwich	216,292	183,814
Sandbach	Congleton	285,622	233,638

These figures have to be normalized to arrive at a useful comparison. To arrive at a meaningful number of rail users per day, for 2016/17, it is necessary to make two assumptions to obtain a daily usage estimate because the figures in the column for entries and exits are for aggregated outward and inward journeys for a full year. These should firstly be divided by two, to arrive at a single round trip. The number of working days in a year is empirically set at 261, however, people still travel by train when not working — although to a lesser extent, so it would be reasonable to further divide the number by an adjusted target, a range of 275 to 325 travel days would seem reasonable. (285,622/2/275-325). This would give the number of people commuting by train from Sandbach at between 440 and 520 per day. Any further assessments should be based upon this figure. This is borne out by a photograph of the station platforms at 0730, prior to departure of one of a number of trains leaving for Manchester and Crewe.

#### 4.4.3 Travel By Bicycle

Travel by Bicycle Work Destination	Sandbach North	Ettiley Heath & Elworth	Sandbach Heath	Crewe Green	Crewe	Scholar Green	
Distance	Less	s Than 3 m	iles	Less Tha	n 6 miles	> 6 miles	
Journey From	CE030	CE031	CE032	CE038	CE039	CE033	
CE030 Sandbach North	13	10	8	0	0	7	38
CE031 Ettiley Heath & Elworth	11	12	8	8	9		48
CE032 Sandbach Heath	11	12	13	6	0	12	54
Totals	35	34	29	14	9	19	140
			98		23	19	140

This tells us that of 140 respondents who said that they travelled to work by bicycle in 2011, 98 commuted entirely within the Sandbach boundaries. Worthy of note are the 23 who cycled to Crewe Green. This has potential to increase, given the significant increase in commercial developments at Crewe Gates Industrial Estate. It is noted that the Crewe and Nantwich Cycling Delivery Plan has identified this as a strategic route, via Haslington. Cohesion between this and the Sandbach Strategy would enhance this route as a commuter choice.

# 4.5 Air Quality

Air Quality Assessments were carried out by Cheshire East Council at strategic positions in relation to planning applications from 2012 onwards. Bureau Veritas were engaged to carry out an independent report on the assessments. The report is comprehensive, detailed, and often quite technical. It is not for the Sandbach Cycling Working Group to engage in value judgments, however, the Bureau Veritas report does contain information that provides a useful indicator in support of the objectives in relation to strategic cycling routes, particularly in relation to Strategic Route 1 – Middlewich Road.

Cheshire East Cour	ncil Planning Application Review - Bureau Veritas 2017
Application Number	12/1463C / 15/0446C
Scheme Location	Land South of Middlewich Road and East of Abbey Road, Sandbach
	12/1463C: Demolition of 170 and 172 Middlewich Road, Sandbach,
Scheme Description	Formation of New Access to Serve Residential Development of up to 280
	Dwellings, Landscaping, Open Space, Highways and Associated Works
	15/0446C: Erection of 154 two storey detached, semi-detached and mews
Scheme Description	dwellings landscaping, formation of community park, open space, parking
	and associated works
Assigned Risk	High
	One diffusion tube has been used for verification. The tube was identified
	within the diffusion tube review as having the incorrect data assigned to it
	during processing. A different concentration has been used for
Risk Justification	verification causing the verification factor that has been calculated to be
	lower than potentially it should have been. Due to this, modelled
	concentrations may be lower than they should be and the conclusions of
	the impact assessment may change.
Application Number	12/3948C / 14/0043C
Scheme Location	Land Bounded by Old Mill Road & M6 Northbound Slip Road, Sandbach
	12/3948C: Outline application for commercial development comprising of
Scheme Description	family pub/restaurant, 63 bedroom hotel, Drive through cafe, Eat in cafe
Scheme Bescription	and office and light industrial commercial units with an adjacent
	residential development of up to 250 dwellings.
	14/0043C: Improvement of J17 Northbound slip road. Provision of new
Scheme Description	roundabout providing access to development site, Old Mill Road and slip
	road Medium
Assigned Risk	Medium
	Verification of model completed using five diffusion tubes. None of the
	diffusion tubes used within the verification procedure were identified to
Risk Justification	be of concern during the diffusion tube review for the verification year of
	2012, but two were identified as lower than they should have been in
	2013.
Application Number	15/5259C

Scheme Location	Land to the North of 24 Church Lane, Sandbach					
Scheme Description	Erection of 12 dwellings.					
Assigned Risk	Medium					
Risk Justification	The need for an impact assessment has been scoped out of the AQA using IAQM criteria; therefore detailed modelling has not been completed. Due to the location of the development adjacent to the M6 motorway it would have been good practice to complete an exposure assessment to ensure future residents would not be exposed to levels of pollutants above the national objectives.					
Application Number	12/1903C					
Scheme Location	Land North of Congleton Road, Sandbach, Cheshire, CW11 1DN					
Scheme Description	Outline application for the erection of up to 160 dwellings, including landscaping, access and associated infrastructure and the demolition of 130 Congleton Road.					
Assigned Risk	Medium					
Risk Justification	Verification completed against diffusion tube data from 2010, whilst the LAQM review began with the 2011 dataset. One of the diffusion tubes used within the AQA has been identified as contentious in years after 2010; CE152 in 2013.					
Application Number	14/1189C / 15/3158C					
Scheme Location	Land off Abbey Road, Sandbach					
Scheme Description	14/1189C: Proposed residential development of up to 165 dwellings, including 'affordable housing', highway and associated works, public open space and green infrastructure.					
Scheme Description	15/3158C: Outline planning permission for up to 165 residential dwellings, informal public open space, vehicular access point from Abbey Road and associated ancillary works. All matters to be reserved with the exception of the main site access. (Re-submission of 14/1189C)					
Assigned Risk	Medium					
Risk Justification	Two verification factors have been calculated using two diffusion tubes for the first factor and one tube for the second. None of the diffusion tubes used within the verification procedure were identified to be of concern during the diffusion tube review for the verification year of 2014, but two were identified as lower than they should have been in 2013. In addition there were two further tubes that could have been used for verification close to the development location.					
Application Number	13/5242C					
Scheme Location	Land off, Hawthorne Drive, Sandbach, Cheshire, CW11 4JH					
Scheme Description	Residential development comprising 138 dwellings, access and associated works (accompanied by an Environmental Statement).					
Assigned Risk	Low					
Risk Justification	One diffusion tube has been used for verification and the tube was not identified within the diffusion tube review. The use of one diffusion tube for verification was agreed with the Council.					
Application Number	13/2389C / 14/1193C					
Scheme Location	Land South of, Old Mill Road, Sandbach					

Scheme Description	13/2389C: Outline Planning Application for up to 200 Residential Dwellings, Open Space and New Access off the A534/A533 Roundabout at Land South of Old Mill Road
Scheme Description	14/1193C: Outline planning application for up to 200 residential dwellings, open space with all matters reserved
Assigned Risk	Low
Risk Justification	For the four diffusion tubes that have been used within the verification procedure for 2012, none have been identified within the diffusion tube review as being potentially deliberately altered, and the correct concentrations have been used.
Application Number	13/4491C
Scheme Location	Elworth Hall Farm, Dean Close, Sandbach, Cheshire, CW11 1YG
Scheme Description	The erection of 96 dwellings with associated works including the creation of 10 hectares of open space and recreation land (Phase 2), and the amendment of Plots 16 and 17 previously approved under reference 10/2006C (Phase 1) - Resubmission of Application 12/2426C.
Assigned Risk	Low
Risk Justification	Three tubes used for verification that were not identified as potentially being deliberately altered during 2011. All three concentrations were slightly incorrect due to the incorrect raw data assigned as per the LAQM review. As they were all higher within the AQA they should not significantly change the overall conclusions.

#### Assigned Risk is categorised as follows:

**High** – The review found diffusion tube concentrations used within the AQA to be incorrect. If the correct concentrations were to be used the predicted concentrations are likely to change and therefore the conclusions of the AQA may change.

**Medium** – The review found diffusion tube concentrations used within the AQA to be incorrect but the changes in concentration are considered unlikely to significantly change the conclusions of the AQA. In addition, the robustness of the methodology applied within the AQA may be called in to question.

**Low** – No erroneous diffusion tube data was found to be within the AQA and no issues were identified with regards to the applied AQA methodology.

# **4.6 Population Growth**

# **4.6.1** Increase in Housing Provision

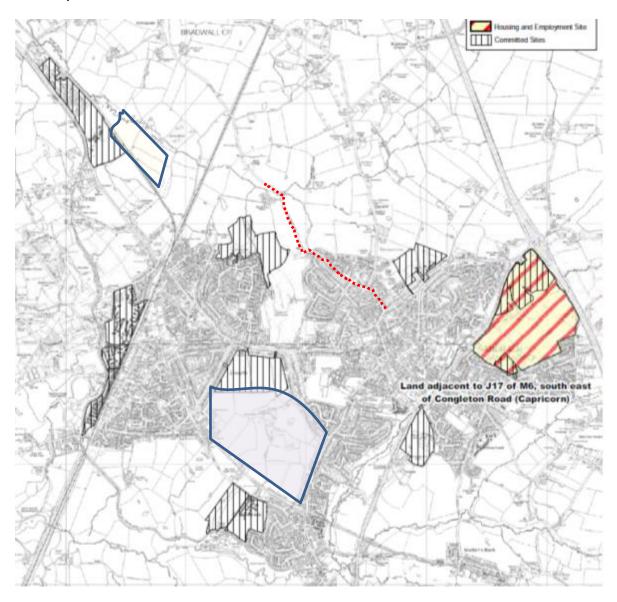
The number of new houses provides a good indicator of population growth. New houses approved beyond 2014 are as follows:

Location/Name of	
Development No. of H	ouses
Fodens	265
TestTrack	118
Canal Fields	102
Former Fodens Moss Lane	48
Albion	371
Hassall Road	43
Elworth Wire Mills	47
Moss Lane	41
Elworth Hall Farm	25
Abbeyfields	154
Abbeyfields 2	165
Hind Heath Road	249
Hind Heath Road 2	120
Hawthorne Drive	50
Hawthorne Drive 2	138
Congleton Road	160
Elworth Hall Farm 2	94
Capricorn Barratts	250
Capricorn Persimmon	188
Capricorn W&S (currently commercial only)	
Old Mill Quarter	200
Newall Avenue depot	39
Wheelock	39
Moss Lane/Station Road	44
Wesley Avenue	10
Waterworks Farm	11
School Lane	13
Moss Lane	13
Magistrates Court	15
Persimmon offices	39
Others	115
Total Approved	3166

The housing stock base-dated at 2014 is 8,000. The increased housing provision indicates a population growth of 40%.

#### 4.6.2 Cheshire East Local Plan

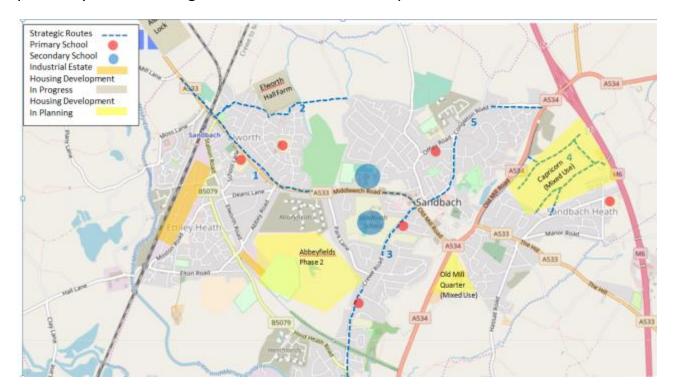
The Cheshire East Local Plan Strategy sets an increase in housing provision between 2010 and 2030 at 2,750, at a rate of 138 new homes per year. Below is an extract from the Strategy that indicates committed sites for housing developments.



The increased housing provision indicated by the Local Plan is less than the actual housing provision reflected by approved planning applications.

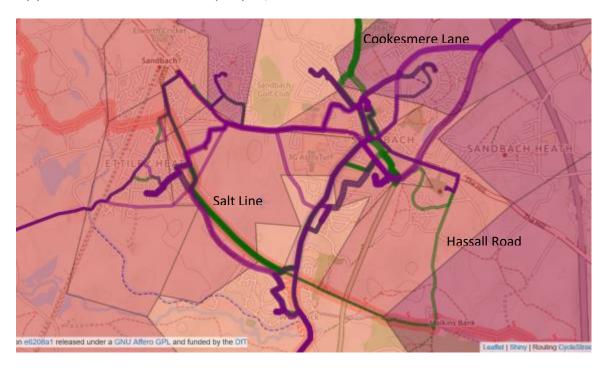
#### 4.7 Travel to Education

No data were available for travel flows to education. The graphic below shows the locations of all the primary and secondary schools in Sandbach, and their proximity to the strategic routes covered in this report.



#### 4.8 Recreational

The graphic below, downloaded from the Propensity to Cycle Tool, indicates the primary recreational routes. It is reasonable to expect that these would be characterised by safe, quiet routes, which are shown as green lines (as opposed to fast routes, in purple).



The Salt Line (otherwise known as Wheelock Rail Trail) is a disused railway branch line. It starts in Ettiley Heath, at Hind Heath Road, and continues until it reaches the golf course at Malkins Bank. It picks up again at Hassall Green, and ends to the north of Alsager. The two legs are connected by the canal towpath, although this is currently not suitable for cycling. Both legs are very popular with dog walkers, families and recreational cyclists, particularly at weekends and holidays. As it is shared use, cyclists are required to extend courtesy to other users.

Hassall Road leads to a wider network of quiet roads towards Winterley, Warmingham and beyond, and also connects to the Alsager leg of the Salt Line.

Cookesmere Lane similarly leads to a network of quiet roads towards Middlewich, Holmes Chapel and Brereton Heath. Both these routes are very popular with weekend cyclists.

#### 4.9 Propensity to Cycle Tool (PCT)

The Propensity to Cycle Tool is an open source tool for sustainable transport planning using data from the 2011 census. PCT considers five scenarios,

- 2011 Census Levels
- Government Target: double cycling from current levels by 2025
- Gender Equity: equalise number of men and women cycling to work.
- Go Dutch: where the same proportion of English people commute to work as in Holland
- E-bikes: where people consider e-bikes for longer and hillier rides.

For this report, two scenarios have been downloaded from PCT, contrasting the percentage of population that cycled work in 2011, and the government target.

Cycling levels are portrayed pictorially, levels of cycling colour coded. Fast routes are shown as purple lines, quiet routes are green.

#### **4.9.1 Current Cycling Levels**



PCT: Current Cycling Levels at LSOA Level

The highest concentration of people cycling to work is along the Crewe Road corridor, ranging from the town centre through Wheelock, which is the closest part of Sandbach to employment areas in Crewe. 7 to 9% of the population

cycle to work in this area. The Queens Drive/Belmont Drive estate shares the same rating.

The lowest percentages occur east of the town centre, Sandbach Heath and also the Gawsworth Drive estate south of Congleton Road, 0-1%.

The rest of the town is rated at 2-3% of the population cycling to work.

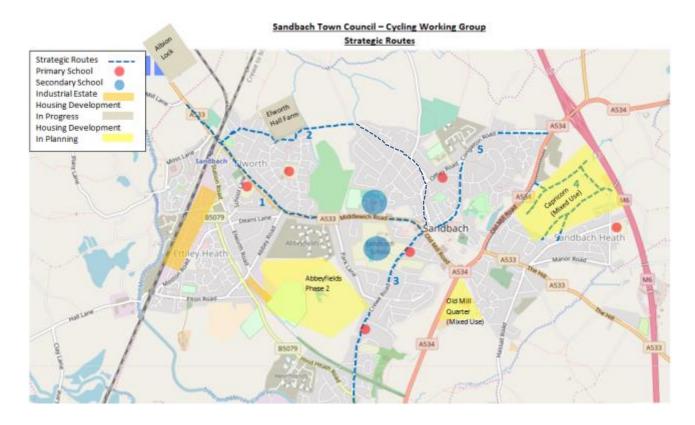
#### 4.9.2 Government Target Scenario



**PCT: Government Target Cycling Rates** 

In the government target scenario, the Crewe Road corridor is again the most popular area for cycling to work, the percentage increasing to 10-14%. The Queens Drive/Belmont Drive estate north of the town centre also rates at 10-14%. The rest of the town, with the exception of the Gawsworth Drive/Arlington Drive Estate increases to 4-6%.

# **5. Strategic Routes**



The Five Strategic Routes selected are shown in the above plan, together with schools, employment areas, and new and planned housing developments. The routes are described in more detail in Section 7, however, it is useful at this point to summarize the ways in which these routes would be of benefit to the town.

# 5.1 - Strategic Route 1: A533 Middlewich Road/London Road/Booth Lane

This is the most direct connection from Sandbach town centre and all points east to the Railway Station, which is situated 1.5 miles from the town centre. A large number of people travel to work by rail from Sandbach, particularly to Manchester. (Statistics to support this in Section 7). Most people currently drive to the station, which has become increasingly problematical because of parking issues, and high volumes of traffic along Middlewich Road. The two secondary schools (Sandbach High School – girls, Sandbach School on Crewe Rioad – boys) are also easily accessible by bicycle from Elworth and Ettiley Heath along this

route. Middlewich Road is a very busy road, particularly at peak times, and carries heavy goods traffic to and from the industrial works towards Middlewich. There are significant air quality issues which are borne out by Bureau Veritas report. In terms of the Propensity to Cycle Tool, this is a fast route but not a quiet route.

# 5.2 - Strategic Route 2: Connection from Cookesmere Lane to A533 London Road

This route is an alternative to 1. above, in that it provides a route to the railway station from Sandbach town centre and all points east, except that it follows quiet roads (Bradwall Road, Cookesmere Lane), before continuing through estate roads to London Road. It is slightly longer although not by much, than Route 1. It also offers a safe, quiet route to the rear entrance of Sandbach High School from Elworth and Ettiley Heath. The problem with this route is that to connect Cookesmere Lane to London Road requires purchase of a small amount of land, the historic track connecting the two having been ploughed in around fifty years ago. If this can be overcome, it offers an attractive safe, quiet and relatively direct alternative to busy Middlewich Road.

# 5.3 - Strategic Route 3: Crewe Road

This route connects Sandbach to Crewe via Winterley and Haslington. A large number of Sandbach residents commute to Crewe, particularly the new employment areas that have established (and continue to do so) around Crewe Green. (See Propensity to Cycle Tool Section 4.9). The distance from Sandbach Town Centre to Crewe Green is 4.5 miles. One reason that this is a prime candidate is that this same route is selected in the Crewe and Nantwich Delivery Plan, connecting Crewe to Haslington. Another is that many cyclists use the direct route via the busy, fast A534 Wheelock and Haslington bypasses, by cycling within the hardstrip, which is less than 600mm in places. It would be a significant achievement for both Crewe & Nantwich and Sandbach to persuade cyclists to use this route. Within Sandbach, this route connects residential estates to the west of the town to Sandbach School and primary schools situated along Crewe Road.

# 5.4 - Strategic Route 4: Capricorn

The Capricorn Development actually consists of three individual schemes: Barratts, currently in progress on Old Mill Road towards M6 Junction 17, W&S Developments, a mixed use development to the east of the area, and Persimmon, to the south west of the site. There is one existing footpath, FP14, that connects Hawthorne Drive to Church Lane, and another, agreed with the developers, running alongside the wildlife preservation area parallel to Old Mill Road. The opportunity exists to convert these footpaths to cycleways, and importantly, connect these to Old Mill Road. This opens up the residential developments to walk or cycle into the town centre instead of resorting to vehicles. Similarly, the connection to Church Lane affords safe access from the Capricorn Site and Sandbach Heath generally to St Johns Primary school. This is seen as a key objective for the SMOTS initiative.

## 5.5 - Strategic Route 5: Congleton Road

This route connects residents from estates to the east of Sandbach to the town centre and education centres, and taken together with routes 1. and/or 2. above, would help to provide a safe, quiet route to the railway station.

# 5.6 - Cohesive Strategic Route Planning

A persuasive reason why these routes were selected is that they "knit" together to form a network that enable travel across the length and breadth of the town, connecting residents to schools, work and the railway station from any point in the town. Sandbach is no more than three miles from end to end in every direction, and the strategic routes noted are underpinned by a network of safe, quiet estate roads that make every corner of the town accessible in under 20 minutes. There are a number of minor interventions that would further improve the cohesiveness of the network, and these are touched upon in the Sandbach

Town Cycling Plan. These are to be followed up separately.



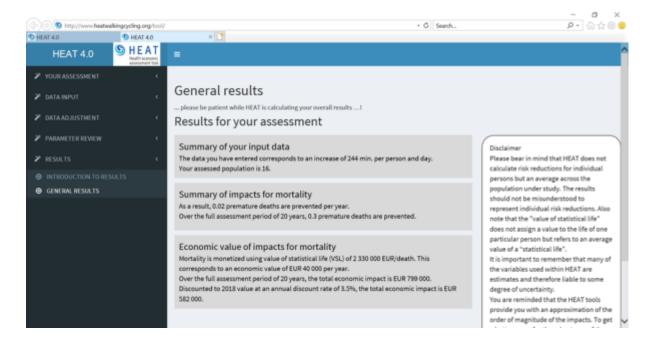
# 6. The Case for Investment

# 6.1 Health Economic Assessment Tool (HEAT) for Cycling

The results from the HEAT calculation described in Section 2 are given below for the three routes where data is available:

Route		Number	r of Trips	HEAT Benefit			
		Current	Government	Covernment Scenario (5)			
		Scenario	Scenario	Government Scenario (£)			
1	Middlewich Road	4	10	£257,384			
2	Cookesmere Lane	No data available					
3	Crewe Road	10	16	£411,432			
4	Capricorn	No data available					
5	Congleton Road	3	7	£183,846			

The output for Crewe Road is given below, as an example:



Results are in Euros – conversion factor to sterling is 0.7071

# **6.2 Scheme Appraisal Tool**

Assessments are incorporated within Route Summaries in Section 7

# **6.3 Level of Service Tool**

The table below contains scores against each performance indicator as noted in Section 2.2, and described in detail in Appendix A.

		Route 1		Route 2		Route 3		Route 4		Route 5	
Key Requirement	Level of Service Cycling Route Audit Tool Scoring Matrix	Middlewich Road		Cookesmere Lane Link		Crewe Road		Capricorn		Congleton Road	
Key	Indicator	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Cohesion	Ability to join/leave route safely and easily: Consider left and right turns	1	1	1	1	1	1	0	2	1	2
	Provision for cyclists throughout the whole length of the route	0	2	0	2	0	2	0	2	0	2
	Density of routes based on mesh width ie distances     between primary and secondary routes within the network      Density of routes Density Fortes in relativistic for the secondary routes.	1	1	1	2	1	1	0	2	0	2
Directness	<ol> <li>Deviation of route. Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative</li> </ol>	2	2	1	1	2	2	0	1	2	2
	5. Stopping and give way frequency	1	1	1	1	1	1	0	1	1	1
	6. Delay at junctions	1	1	1	1	1	2	0	2	1	1
	7. Ability to maintain own speed on links	0	2	1	1	1	2	0	2	0	2
	8. Gradient	2	2	2	2	1	1	1	1	2	2
Safety	<ol> <li>Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction</li> </ol>	1	1	1	1	1	1	0	0	1	1
	10. Motor traffic speed on sections of shared carriageway*	0	1	0	1	0	1	0	0	0	1
	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	1	1	1	1	1	1	2	2	1	1
	12. Segregation to reduce risk of collision alongside or from behind	0	2	0	2	0	2	2	2	0	2
	13. Conflicting movements at junctions	0	1	0	2	0	2	2	2	0	2
	14. Legible road markings and road layout	0	2	0	2	0	2	0	1	0	2
	15. Conflict with kerbside activity	0	1	1	1	0	1	0	2	0	1
	16. Evasion room and unnecessary hazards	1	2	1	1	0	2	0	2	1	2
Comfort	17. Major and minor defects	0	2	1	1	0	2	2	2	0	2
	18. Surface type	2	2	1	1	2	2	0	2	2	2
	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	0	2	1	1	0	2	0	2	0	2
	20. Signing	1	2	0	2	2	2	0	2	1	2
Attractiveness	21. Lighting	2	2	1	2	2	2	0	2	2	2
	22. Isolation	2	2	1	2	2	2	0	2	2	2
	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 4.7)	1	2	0	2	1	2	0	2	1	2
	24. Signs informative and consistent but not overbearing or of inappropriate size	2	2	0	1	2	2	1	1	2	2
	25. Evidence of bicycles parked to street furniture or cycle stands	1	2	0	0	0	2	0	1	1	2
	Totals	22	41	17	34	21	42	10	40	21	44

<sup>\*</sup>For Indicator 10, at peak periods, traffic speed is likely to be lower

# 7. Route Summaries

# 7.1 Strategic Route 1: Middlewich Road



### 7.1.1 Route Summary

The route starts at Hightown in the town centre, following Old Middlewich Road until it merges into A533 Middlewich Road proper. The road passes Sandbach High School (Girls) and Sandbach School (Boys) and CEC Offices at Westfield. From this point, the route is relatively wide and clear, passing new and existing housing until it reaches Elworth, where it narrows dramatically, leading to the Railway Station. It then crosses a bridge over the main railway line from Crewe to Manchester, before it exits the town.

# 7.1.2 The Strategic Case

Middlewich Road connects the town centre and all points beyond with the railway station. By improving the cycling facility, ie, making it feel safer, and enhancing the visibility of the route, many more people would be encouraged to cycle to the station as part of their daily commute.

The (only) two secondary schools are located either side of Middlewich Road. Improvements would encourage more students to cycle to school.

There are multiple housing developments taking place adjacent to Middlewich Road – Abbeyfields, Albion Lock, Elworth Hall Farm, Elworth Gardens. Residents should be encouraged to cycle to and from the town centre.

### 7.1.3 Scheme Appraisal Tool

Option Details					
Option Number:	Route 1			_	
Option Location	Middlewich Road/London Road/Booth Lane				
Option Description	Direct Route from Sandbach Town Centre, passing two secondary schools, two primary schools, new housing developments and leading to the railway station 1.5 miles from the town centre. Currently unsafe for cycling, used extensively by HGV's. Interventions not established. Interventions may include widenings and/or footpath diversions.				
				Critical Fail without this (x)	×
Scheme Option:				Primary school Impact (x)	×
Option Filtering					
Deliverability		Note:	lt includes	he social / comunity acceptability	
Practical Feasibility					
Cost T					
Option Appraisal					
Contribution towards the	Study Objectives	Wei	ghting Fa		
<ol> <li>Route function - Supp</li> </ol>	ort Employment	•	1	2 Very High (+2)	
2 Route function - Supp	ort Leisure	•	1	2 Very High (+2)	
3 Route function - Acces	s to Education	•	1	2 Very High (+2)	
4 Route function - Acces	ss to Local facilities	•	1	1 High (+1)	
5 Contributes to unlocki	ng growth sites (housing and employment)	•	1	2 Very High (+2)	
	ng growth sites (housing and employment) ncluding household income (where cost of transport m	ay F	1		
6 General deprivation: Ir		ay F		2 Very High (+2)	
6 General deprivation: Ir 7 Routes in areas which	acluding household income (where cost of transport m	e ay F	1	Very High (+2)  Neutral	
6 General deprivation: Ir 7 Routes in areas which 8 Maximise interchange	ncluding household income (where cost of transport mexperience high number of traffic collisions	ay F	1	Very High (+2)  O Neutral  Neutral	

# **7.1.4** Supporting Information

References to Locations on the attached Aerial Plans (7.1.7) are given as A,B,C etc. and references to photographs (7.1.8) are given as 1, 2, 3 etc.

The route from Hightown to its junction with Middlewich Road, is shared with vehicles along Old Middlewich Road. Heading out of town it is then necessary to cross the busy Middlewich Road. This is an inconvenience, as it means dismounting and re-mounting, however, there would seem to be no viable alternative. Continuing to head out of town, the road is narrow. There are short lengths of cycle lane at the traffic lit junction with Chapel Street and Ashfields PCT. There are potential opportunities to widen the road, although this can not be verified without a thorough survey.

The road continues to be fairly narrow beyond Westfields and the High School. This section of road is extremely busy at peak times, and is used extensively by Heavy Goods Vehicles. Cycling this short section can feel quite unsafe, particularly at peak times, which would be when cyclists would be commuting to and from work. It is suggested that transport specialists are consulted to consider what options are available to make this route safe. From Westfields to St Peters Church, the road would appear to be wide enough to accommodate "armadillo" type lane separation. Again, this would need a proper survey to establish whether this is feasible.

From St Peters Church to the town boundary, there is a serious pinch point this side of Sandbach Railway Station. A separate section has been dedicated to this, in the form of a case study. See 7.1.8.

Beyond Station Road, the route crosses the main railway line. There is no viable way of incorporating a cycleway across this bridge.

### 7.1.5 Possible Interventions

The whole route could be developed by installing cycle lanes either side. As per engineering guidance these should be 1.50 metres minimum width. Should this not be achievable then it would be better to not pursue this concept.

At "pinch points" remove centre white line, signing indicating traffic priority from one direction and give way for the other direction. Those stretches of the road would be from the start of the route to its junction with Park Lane and then from St Peter's Rise to the end of the route at the railway bridge.

The stretch of road between Park Lane and Abbey Road might allow cycle lanes either side without removing the centre white line. The recently installed pedestrian refuge near Park Lane unfortunately provides another pinch point. Ideally it would be replaced with a pedestrian crossing.

A pedestrian crossing could be installed at Abbey Road. This would benefit cyclists indirectly by breaking the flow of car traffic and allowing to join Middlewich Road from Abbey Road.

The Northbound lane of London Road between Hill Street and Station Road is occupied by parked cars, and presents a severe pinch point because there is only just sufficient width for two cars to pass. At this location it is recommended that the speed limit be reduced to 20mph. This is an issue for all traffic, not only cyclists. This is considered in more detail in 7.1.8 – Sandbach Railway Station - Case Study.

Looking at the direction of travel into Sandbach town centre another minor intervention would be opening Old Middlewich Road for contraflow cycling.

On the section of road between St Peter's Rise and Vicarage Lane, there is a broad grass verge which could be utilised to create a dedicated cycle path, retaining the road width, segregation of pedestrian and cyclists, as well as preserving the service road for residents. On the narrow section of road opposite Westfields this is not possible, but as the land is owned by the council, there may be an opportunity to make this part of the route safer.

The issues to establish safe cycling along this route are quite complex, and to establish what type of intervention is necessary requires a comprehensive survey, analysis of traffic volumes etc. and as such, the engagement of transport professionals would be required.

Ultimately the strategic solution for transport as a whole may be a bypass linking junction 17 to the planned Middlewich bypass. That would immediately and permanently turn Middlewich Road into a safe and attractive route for rail commuters and students.

# 7.1.6 Aerial Views of Middlewich Road

# **Hightown to Sandbach Golf Club**



Sandbach Golf Club to Abbey Road



**Abbey Road to St Peter's Church** 



St Peter's Church to Town Boundary



# 7.1.7 Middlewich Road Photo Gallery



# 7.1.8 Sandbach Railway Station – Case Study

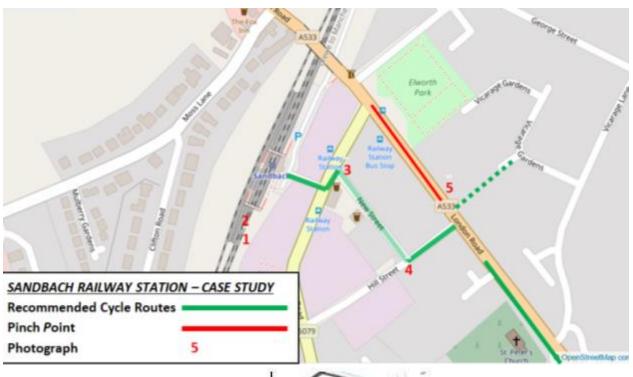
This is a short case study, focussing on Sandbach Railway Station. The railway station is a repeated theme in strategic cycle routes. The station is located about 1.5 miles north west of the town centre, and, as such is outside normal walking distance for 66% of the population. It is, however, within easy cycling distance for the whole town.

Currently, the station handles 440 to 520 passengers per day (ORR statistics). This is backed up by photograph 1, taken on a typical weekday morning, there are 90 passengers waiting for the 08:03 to Manchester Piccadilly, one of four trains arriving in Manchester before 09:00. Photograph 2 shows 6 bicycles in the bike racks (one of which belongs to the photographer). On this limited sample size, this represents a 1% uptake in cycling.

Primary access to the railway station from the rest of the town outside of Elworth and Ettiley Heath is via Middlewich Road/London Road. Improvements to make this stretch of road more cycle friendly are covered elsewhere. As London Road approaches the traffic lights at its junction with Station Road, there is a "pinch point" caused by residents' parked cars, which is impassable for two vehicles when one is an HGV. It is normal for one vehicle to mount the footpath. (See Photo 5). This is not only unsafe for cyclists, but also pedestrians. This problem is much wider than just cycling provision, for which no safe solution springs to mind.

The alternative route for cycling to the station is via Hill Street and New Street (Phots 3 and 4). This is not ideal, because station users park on both sides of both roads to avoid station parking charges, however it is usually quiet, and clear signage together with improvements to Middlewich Road generally, would greatly enhance the propesity for people to cycle to Sandbach Station as a normal part of their daily commute.

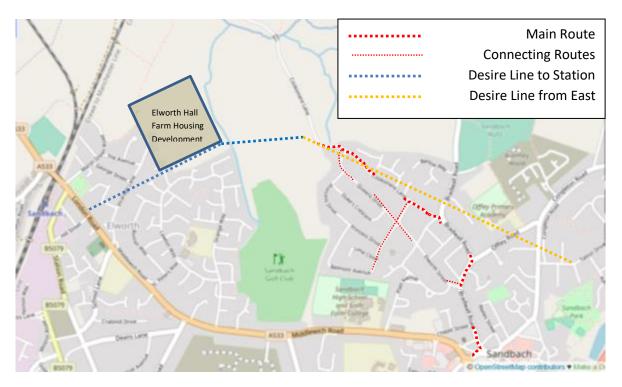
The next page contains a plan of the station and surrounding streets, along with six photographs showing the current situation.





# 7. Route Summaries

# 7.2 Strategic Route 2: Cookesmere Lane Link



### 7.2.1 Route Summary

The route starts at Hightown in the town centre, following Bradwall Road until turning left on to Cookesmere Lane. (Alternative noted via Elworth Street and Queens Drive. As this road leaves the built up area, leading to open countryside, there is a short access road that leads into fields. At this point there is no current right of way, and the blue lines indicate a "desire line" that joins Cookesmere Lane to Elworth. This is the pivotal issue, dealt with in more detail in a case study (Section 7.2.9). From there the route takes estate roads to London Road, linking to the railway station. It is not necessary at this stage to prescribe passage through Elworth estate roads.

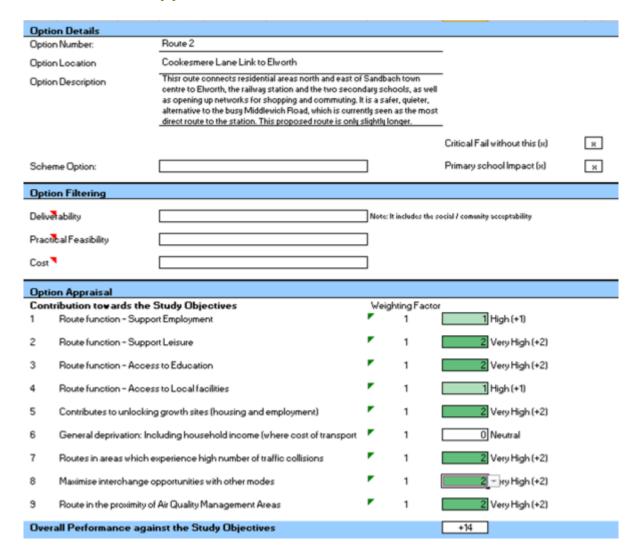
### 7.2.2 The Strategic Case

This route offers an alternative connection between the town centre and all points beyond with the railway station. It works either as safer alternative to, or an addition to Route 1 – Middlewich Route, as both routes start and end at the same point. This route is slightly, but not appreciable longer. For the most part, improved signage and other minor interventions would improve the route for cyclists, because it is mostly along quiet estate roads.

This route also provides a safe, quiet route for student from Elworth and Ettiley Heath, and other parts of the town to access Sandbach High School via the rear entrance.

From a recreational perspective, this route also offers a safe, quiet, yet direct route to Middlewich. An alternative to this is via the canal towpath, which would require significant work to accommodate cycling.

# 7.2.3 Scheme Appraisal Tool



### 7.2.4 Supporting Information

There are variety of routes that can be taken from Sandbach town centre, the one depicted is a possible option, with the less prominent red dotted lines indicating a mininetwork of estate roads in the Princess/Queens Drive estate, indicating cohesion. A blue "desire line" is shown, in respect of which a number of routes may be taken to connect the housing estates to the station

A further "desire line" in orange is shown on the plan, which is demonstrative of the benefits of a route that joins East Sandbach to Elworth, the railway station and the secondary schools.

The "green field" element is dealt with in 7.2.8, Cookesmere Link Case Study. This gives more detail on the case for establishing a public right of way to connect Cookesmere Lane to Elworth. This is presented as a separate case study because it is pivotal for this route to work. This is being pursued separately via Cheshire East Public Rights of Way Team, and the case study is part of this process.

### 7.2.5 Possible Interventions

For the most part, this route needs little more than signage, because it predominantly occupies quiet estate roads. Because this is seen as a safe alternative route from the North and East Sandbach to the railway station, signs should be placed at strategic locations to clearly direct cyclists. There should also be clear signage from the Elworth housing estates to the two secondary schools.

Improvements could be made by way of cycle lanes along Bradwall Road, which is quite narrow, and also to Vicarage Lane.

Should attempts to secure an easement connecting Cookesmere Lane to Elworth, then a 3 metre wide cycle lane of approximately 100 metres in length would be required, along with gates at either end. Lighting is another consideration.

# 7.2.6 Aerial Views







# 7.2.7 Cookesmere Lane Photo Gallery





# 7.2.8 Case Study - Connection from A533 London Road to Cookesmere Lane.

The only current viable access for Elworth residents into Sandbach, and to Sandbach High School is via A533 London Road. Many years ago, an alternative existed, by way of a track that connected London Road to Wood Lane. This has fallen into disuse. It would be of huge benefit to the residents of Elworth, in terms of offering a safe, quiet and direct alternative route into Sandbach and the High School. It is also, a potential — and direct route for residents of other parts Sandbach to the railway station — for example the Queens Drive Estate and the Gawsworth Drive Estate. This is a short note on how this may be achieved.



The "Ancient" track, depicted on OS maps dated 1875 and 1949, serving Elworth Hall Farm, connecting it to London Road (A533) and Wood Lane, is now no longer in use, and would appear to have been obliterated. There is a housing development currently taking place on the site of Elworth Hall Farm. (The red dot). The ideal cycle route/footpath would have been exiting this development at "W" above, leading to Wood Lane at "Y."

There is now no trace of any track ever to have existed between "X" and "Y" apart from two trees that would have lined the track. There is a gateway on Wood Lane that marks the end of the track.

A major "blocker" to this proposal is that the entire route between W and Y belongs to a private landowner, so that any proposal to install a 3 metre wide

cycle path would result in blight and subsequent cost to the council – or the developer, should this be subject to S106 funding. However, it may be that a solution can be brokered that minimizes any disruption to the landowner, by following the hedgeline from W to X, and then following the field border towards the existing metalled track at Z, at the end of Cookesmere Lane.

Notwithstanding all the above, it may be that the least disruptive route, on the basis that there may have to some consideration to the landowner (and that the existing footpaths FP3/FP36 present no benefit in terms of access to the town centre or schools, the best solution could be a connection from the end of Blakemere Way



In the diagram above, the "Desire Lines" are shown as solid white lines. These would apply to residents of the Queens Drive Estate and the Gawsworth Drive Estate that commute to their place of work by train, and need a practical route to Sandbach Station.

The current situation is that the only viable route is by using the main road, indicated by red dotted lines. Currently this is not a safe option for cyclists, and most people drive to the station. There is no statistical evidence to support this statement, but it is widely acknowledged to be the case. Neither can it be proven that the same people would switch to cycling, although parking provisions will lead to them seeking other options.

Should the connection from Wood Lane/Cookesmere Lane (highlighted orange) to take place, then cycle access is possible via safe, quiet, and probably faster routes using estate roads and back lanes. These routes are shown as yellow dotted lines.

# 7. Route Summaries

# 7.3 Strategic Route 3: Crewe Road



### 7.3.1 Route Summary

The route starts at Hightown in the town centre, traversing a busy roundabout which forms the confluence of Crewe Road, Middlewich Road, Hightown and Old Mill Road. There is no cycle lane provision on either side of the route for several hundred metres. Sandbach School (Boys) is passed on the right, heading out of town, Sandbach County Primary School and Wheelock Primary School on the left. Crewe Road continues to the roundabout intersection with the Wheelock and Haslington by-passes, before heading towards Crewe via Winterley and Haslington.

#### 7.3.2 The Strategic Case

A vibrant and rapidly expanding employment area is located to the south east of Crewe, beyond Crewe Green, known colloquially as Crewe Gates. Section 4.4 of this report provides statistical evidence of people commuting between Sandbach (particularly Elworth, Wheelock and Ettiley Heath) and Crewe Green. Improvement of this route will encourage people to commute via Wheelock, Winterley and Haslington.

A persuasive reason to improve cycling provision on Crewe Road is that the cycle corridor from Crewe to Haslington is featured in the Crewe and Nantwich Cycling Delivery Plan as Strategic Route 3 in Section 5 of that document. It would

make sense to join this Crewe Road route to enable a continuous link between Crewe and Sandbach. This route forms part of the Strategic Cycle Route Network Plan for Cheshire East, referred to in Figure 6 within Section 5.14 of the Cheshire East Cycling Strategy. (As an aside, the same indicates a route from Sandbach to Alsager via the Wheelock Rail Trail, which not viable as it is bisected by Malkins Bank Golf Course).

The evidence also indicates use of the "fast" route via the Wheelock and Haslington by-passes, where cyclists use the 0.6m hardstrip inside the channel line, alongside HGV's and other fast traffic. This is not safe and should be discouraged. The Crewe Road Route is not much further in distance but much safer.

With regard to safety, it is worthy of note that the Road Safety Audit 1 & 2, Hind Heath Road\_Crewe Road S278 works from 2013 notes:

"Observations during the site visit indicate that approach speeds to the crossing are relatively high and many vehicles are seen to be travelling above the posted 30mph speed limit.' (3.5 Problem; LOCATION Crewe Road - controlled crossing; SUMMARY: NMU to vehicle conflict due to excessive approach speeds)"

# 7.3.3 Scheme Appraisal Tool

Option Details					
Option Number:	Route 3			_	
Option Location	Crewe Road				
Option Description	This route used to be the main road connecting Sar Motorised traffic now use the Wheelock bypass, cor need of improvement for cyclists because of the ten to commute to Creve. It is no less direct, but it conta need to be remedied. This is supported by increase.	pass			
				Critical Fail without this (x)	×
Scheme Option:				Primary school Impact (x)	X
Option Filtering					
Deliverability		Note:	lt includes	the social / comunity acceptability	
Practical Feasibility					
Cost					
Option Appraisal					
Contribution towards th	e Study Objectives	Weig	ghting Fa	actor	
<ol> <li>Route function - Sup</li> </ol>	port Employment	•	1	2 Very High (+2)	
<li>2 Route function - Sup</li>	port Leisure	•	1	1 High (+1)	
3 Route function - Acc	ess to Education	•	1	1 High (+1)	
4 Route function - Acc	ess to Local facilities	•	1	1 High (+1)	
5 Contributes to unlock	Contributes to unlocking growth sites (housing and employment)		1	1 High (+1)	
6 General deprivation:	General deprivation: Including household income (where cost of		1	0 Neutral	
7 Routes in areas whice	Routes in areas which experience high number of traffic collisions		1	2 Very High (+2)	
8 Maximise interchang	8 Maximise interchange opportunities with other modes		1	2 Very High (+2)	
9 Route in the proximit	y of Air Quality Management Areas	•	1	2 Very High (+2)	
Overall Performance against the Study Objectives				+12	

### 7.3.4 Supporting Information

The road is relatively wide and clear, for most of its length. A cycle lane has been marked on both sides, from Park Lane to Zan. (see Aerial Photographs). There is a cycle lane "bypass" at the Hind Heath Road traffic lights, where the cycle lane is diverted on to a shared footpath. There is a pinch point at the bridge crossing the Salt Line (Wheelock Rail Trail). The road narrows as it passes through Wheelock village. The ideal situation would be to implement a segregated cycle lane on both sides of the road for its entire length, i.e. from Sandbach town centre to Wheelock Hall Farm. Whilst not forming park of this report, there would be a considerable advantage in continuing this provision through Winterley to Haslington, thus linking up with the Crewe and Nantwich strategic route.

This would be defined as a Primary Route under the auspices of the Cheshire East Cycling Strategy.

Visual representations of this route are provided by way of aerial photographs and photographs along the route are included in following Sections 7.3.6 and 7.3.7

#### 7.3.5 Possible Interventions

The whole route could be improved via continuous cycle lanes on both sides of the road. At "pinch points," remove centre white line, signing indicating traffic priority from one direction and give way for the other direction.

Suggestions: Travelling northbound from Wheelock to Sandbach town centre: At the beginning of the 30 mph speed limit to Zan Industrial Park, the priority should be southbound. That is because there is parking on the east, northbound, side which presumably would be retained. Alternatively, or additionally, parking could be removed.

The reasoning behind this "pinch point" scheme is that parked vehicles naturally disrupt the flow of traffic on the side where there is parking. Thus there is actually no change to the priority, except that as the road now becomes

effectively single track, the 'blocked' traffic is required to wait rather than driving on regardless.

Hind Heath Lane and Park Lane: Widen the cycle lanes between Hind Heath Lane and Park Lane to 1.50 metres. Should the centre white line be removed, then widen the cycle lanes further. Any form of segregation via a cycle lane that is mandatory or via 'light segregation' would be desirable though might be difficult to achieve due to numerous driveways. For examples of 'light segregation' please see Appendix 2 included in Methodology for Creating a Town Cycling Plan Rev 0.2: Photographs of Example Interventions.

The section between Park Lane and the town centre could follow a pattern similar to Wheelock, i.e. creating space via give way arrangements and/or by removing car parking.

There are a number of possible interventions along this route to make it feel safer, some are described above. To establish what type of intervention is necessary requires a comprehensive survey, analysis of traffic volumes etc. Given the aspiration to improve this route for cycling, in particular to encourage cycling as a means of commuting to the Crewe Gates employment area, the support of Cheshire East transport professionals would be appreciated.

# 7.3.6 Aerial Views of Crewe Road

**Hightown to Park Lane** 



**Park Lane to Hind Heath Road** 



**Hind Heath Road to Christ Church Wheelock** 



**Christ Church to Wheelock Heath/Winterley** 



# **7.3.7** Crewe Road Photo Gallery



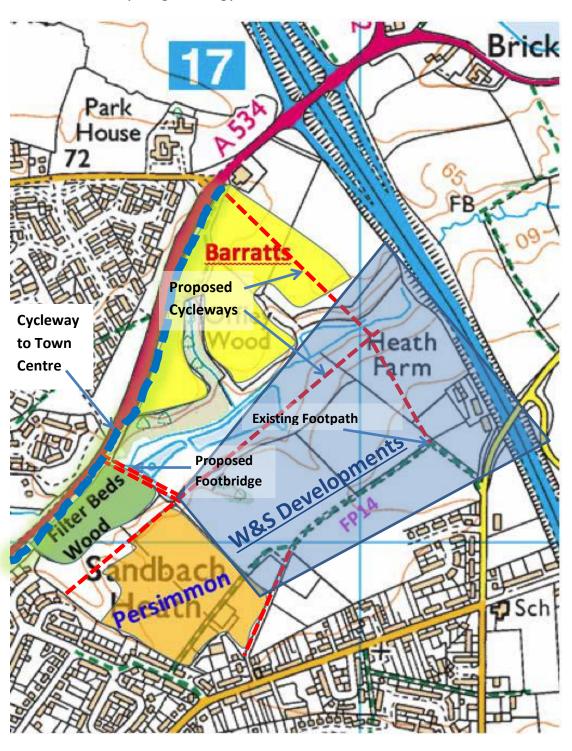






# 7.4 Strategic Route 4: Capricorn

This route is centred around a series of new residential and housing developments taking place within an enclosed green field area, and, as such, empirical data does not yet exist. Notwithstanding this, a strong case for cycling provision can be put on the basis of aspirations and objectives set out in the Cheshire East Cycling Strategy.



#### 7.4.1 Route Summary

Capricorn is the generic name for a series of mixed use developments planned and under construction within the area bounded by Old Mill Road to the North West, the M6 motorway to the North East, and by Church Lane, Heath Road and Hawthorne Drive to the South. The whole area was predominantly green space, with the exception of farm buildings along Church Lane. The area has long been earmarked for development, confirmed in the Cheshire East Local Plan. The overall site plan roughly resembles a rhomboid, with a base measuring approximately 700m, tapering to 400m over a distance of 800m. An area of around 0.4 sq. km. Part of the site (The Barratts' development, to the north west) is currently under construction, the rest is subject to planning approval. A schematic plan of the site is given in 7.4.6.

The strategic cycle "route" for Capricorn concerns the upgrading of a network of existing and proposed footpaths for shared use as cycleways.

There is an existing footpath (FP14, green dashed line) that runs from Hawthorne Drive to Church Lane. The Sandbach Footpath Group, in conjunction with the Sandbach Woodland Group, has gained agreement in principle to new footpaths (shown as red dashed lines) from Daisybank Drive to the Barratts development, and another footpath linking the Barratts Development to Church Lane. There is also agreement in principle to a footbridge, crossing Arclid Brook, which would link this network to the recently constructed footpath that runs along Old Mill Road (green solid line) that would connect all the footpaths in the Capricorn Developments to Sandbach Town Centre, for shopping, schools and employment. It has been agreed with the Footpath and Wildlife Groups that these footpaths could be upgraded to cycleway standard.

### 7.4.2 The Strategic Case

#### 7.4.2.1 Schools

Once the developments have been approved, the total increase in dwellings for the combined developments will be between 450 and 700. The variance is because applications by W&S Developments switch between residential and commercial use. Datashine (Population Basics/Adult Lifestage) indicates that 25% to 50% of Sandbach Heath residents are 65 years old and over. The type of

housing offered will change the demographic in such a way that there will be an increase in family occupation. That will place demands on primary and secondary education provision.

There are two primary schools (St Johns, Sandbach Heath and Offley Road) within range of the development, as well as the two secondary schools. In order to encourage cycling or walking to school, it is important to ensure that when planning new developments of the magnitude of Capricorn, that safe, direct routes into, out of and across the new developments are incorporated into the overall design.

The current position positively discourages cycling. As an example, the primary access route to St Johns's Primary School is via Heath Road, which is effectively impassable for cycling at peak school times because of parked cars and heavy traffic. A well-defined cycle network across the development will encourage more children to cycle to school from within the development, attracting travel away from the busy Heath Road. This would also attract children from the wider Sandbach Heath area.

It is likely that there will be an increase in children attending the two main secondary schools. This makes it important to provide a connection out of the new development towards the town centre. This makes a link from Capricorn on to Old Mill Road a priority, and this is where it is important that the footbridge access across Filter Bed Woods ((noted as "Proposed Footbridge" in the schematic plan at the start of this section) is of critical importance.

Should no provision for cycling or walking be incorporated in the design, then access to This entirely supports Cheshire East Council SMOTS strategy.

#### 7.4.2.2 Access to Town Centre

Access and egress for cyclists, wheelchair users and from the town centre, schools and other facilities is very limited. The Barratts Development at the far eastern extremity of the site, well away from the town centre, links to the newly built cycle/footpath along Old Mill Road. The other access point is the entrance to the Persimmon site on Hawthorne Drive. The Cheshire East Cycling Strategy sets out as follows:

- **5.8** Significant levels of growth are planned in Cheshire East as set out in the Local Plan strategy. This growth is planned to align with various improvements to transport infrastructure and cycling journey options should be provided to new development, linking in with the wider cycling network in Cheshire East.
- **5.9** The National Planning Policy Framework (NPPF) (17) states (Paragraph 17) that a core principle of planning is to actively manage patterns of growth and to make the fullest possible use of public transport, walking and cycling.

This supports active engagement to promote cycling as a primary journey option. This would embrace positive action to facilitate access and egress that encourages cycling and discourages car use. The shared cycleway/footpath network across the Capricorn site goes some way to achieving this objective. Access and egress to the town centre is pivotal, and this is why the footpath bridge over Arclid Brook is vital because this provides a safe, direct link to the cycleway/footpath along Old Mill Road.

# 7.4.3 Scheme Appraisal Tool

Optio	on Number:	Route 4			_	
Optio	on Location	Capricorn				
Optio	on Description	This route looks at the new developments collectively known as Capricorn, providing a network of routes across the developments, and connecting them with schools, employment and the town centre. No such connection is currently planned.			- :	
					Critical Fail without this (x)	×
Sche	eme Option:				Primary school Impact (x)	×
Opti	ion Filtering					
Deliv	erability		Note:	It includes the	social / comunity acceptability	
Prac	tical Feasibility					
Cost	•					
Opti	ion Appraisal					
Con	tribution towards the	Study Objectives	Weig	hting Facto	or .	
1	Route function - Suppo	ort Employment	•	1	2 Very High (+2)	
2	Route function - Suppo	ort Leisure	•	1	Very High (+2)	
3	Route function - Acces	s to Education	•	1	2 Very High (+2)	
4	Route function - Acces	s to Local facilities	•	1	2 Very High (+2)	
5	Contributes to unlocking	ng growth sites (housing and employment)	•	1	2 Very High (+2)	
6	General deprivation: In	cluding household income (where cost of	•	1	0 Neutral	
7	Routes in areas which	experience high number of traffic collisions	•	1	2 Very High (+2)	
8	Maximise interchange	opportunities with other modes	•	1	2 Very High (+2)	
9	Route in the proximity of	of Air Quality Management Areas	•	1	0 Neutral	
Ove	rall Performance agai	nst the Study Objectives			+14	

### 7.4.4 Supporting Information

#### 7.4.4.1 SMOTS

The SMOTS strategy is a positive development, and it offers a fantastic opportunity across the Capricorn site. The Town Cycling Plan (as is) proposes conversion of footpath to cycleway attached, red lines.) This connects from the Persimmon estate to Old Mill Road The new initiative may be helpful to implement a cycle route from the Persimmon Estate and the rest of Sandbach Heath to school by creating a cycleway access into the Persimmon estate at the existing road access on Hawthorne Drive. (Route in Blue Dashed Line). We may be able to achieve a segregated cycle route all the way from there following FP14 through to Church Lane, with a short length of segregated cycleway along Church Lane to reach St John's Primary School. This would avoid cyclists having to use Heath Road. This would require developers to accommodate such a cycleway.

References to Locations on the attached Aerial Plans (7.3.7) are given as A,B,C etc. and references to photographs (7.3.8) are given as 1, 2, 3 etc.

### 7.4.4.2 Department for Transport - Cycling and Walking Investment Strategy

The Department for Transport, in its Cycling and Walking Investment Strategy, states, in paragraph 2.35:

"Through their Local Plans and planning decisions, local planning authorities should ensure developments that generate significant movement are located where travel will be minimised and the use of sustainable transport modes can be maximised. Local Plans, prepared in consultation with local communities, should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Developments should be located and designed where practical to:

- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians

• Site key facilities such as primary schools and local shops within walking distance of most properties, particularly within large scale developments."

The strategy further sets out a number of funding streams which are devolved to local bodies. For example, for 2016-17 to 2020-21, Local Growth Fund.

The Sandbach Town Council Cycling Working Group is aligned to the DfT's strategy, and strongly urge that this strategy is adopted within the Local Transport Plan. The new developments at Sandbach Heath are precisely the target profiles at which the Strategy is aimed.

### 7.4.4.3 Sandbach Neighbourhood Plan

Policy PC5 in the Sandbach Neighbourhood Plan refers to cycling:

http://www.cheshireeast.gov.uk/planning/neighbourhood\_plans/sandbachneighbourhood-plan.aspx

### POLICY PC5 - FOOTPATHS AND CYCLEWAYS

Developments will be expected to establish publicly accessible links from development sites to the wider footpath and cycleways network and green spaces wherever possible. Initiatives for improvement and enhancement to public footpaths and cycleways will be strongly supported. The existing footpaths network as set out in the Public Rights of Way and Footpath Network map Fig.7 will be enhanced. High quality green links between existing public rights of way and other footpaths will be provided in support of this policy.

Proposals which lead to the loss or degradation of any public right of way or cycleway will not be permitted other than in very special circumstances.

Proposals to divert public rights of way and cycleways should provide clear and demonstrable benefits for the wider community.

#### 7.4.4.4 Propensity to Cycle

The Capricorn development – once complete, will comprise some 500 to 800 new houses. Road access to the Barratts site is via Old Mill Road. Road access to the W&S development is close to M6 Junction 17. Road access to the Persimmon development is via Hawthorne Drive. For the Barratts site, the provision (by the developer) of a cycleway the full length of Old Mill Road is of

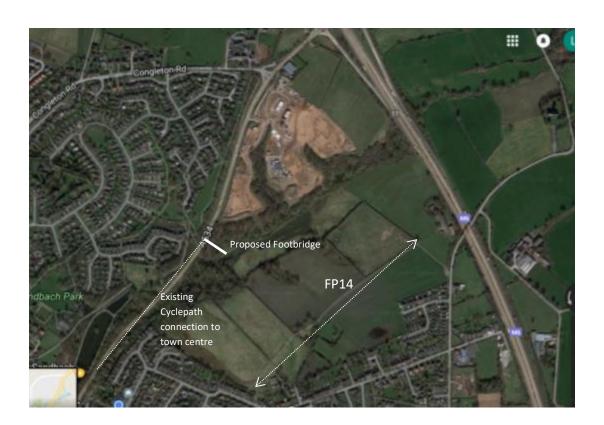
great benefit. For the W&S site (for which no housing is currently planned, although it would be unwise not to allow for this contingency) there is currently no option but to use the road access. In the case of the Persimmon development, where 188 houses are now approved, the propensity to cycle is stifled by the fact that it is necessary to backtrack several hundred metres to leave the estate at Hawthorne Drive.

Ignoring, for now, any residential development on the W&S site, it is clear that to increase the propensity to cycle, either to the town centre, the two secondary schools, Offley Road Primary School, or the Railway Station, relies upon recognisable and direct cycle routes within the development, and most importantly, the link from the developments on to Old Mill Road via the footbridge at Offley Wood.

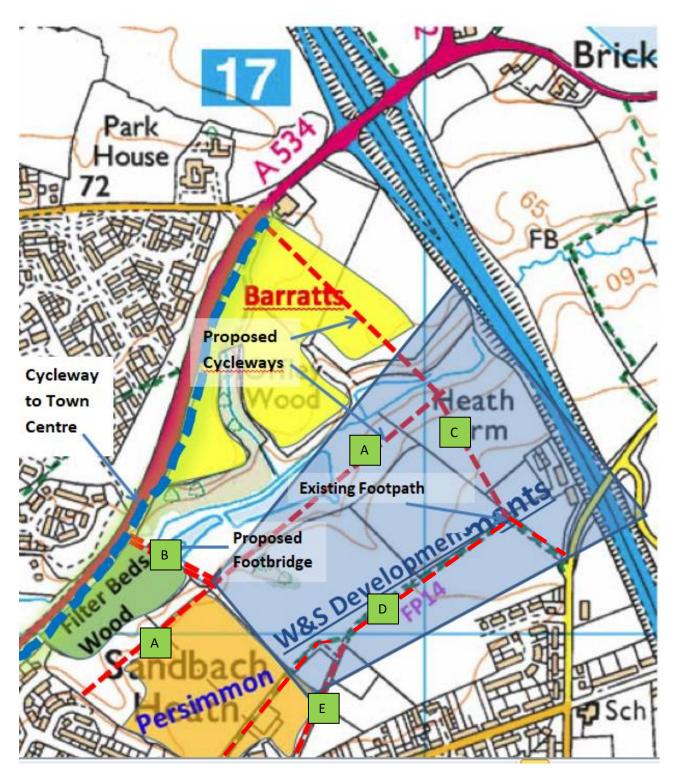
The over-riding aim of all this is to persuade people that the car should not be an automatic choice to travel to work, school or shopping. Section 4.4.1 tells us that 338 out of 894 journeys of 3 miles or less start and finish in the same zone, i.e. less than 1 mile. For most people in Sandbach Heath, and more so once Capricorn is complete, the car is the predominant choice of travel.

# 7.4.5 Aerial Photograph

The Aerial Photograph below shows the current state of development. The Barratts Housing Estate is to the top left, and footpath FP14 as indicated.



### 7.4.6 Possible Interventions



Proposed interventions are shown in red in the diagram above, described below:

A: 3m wide Cycleway from the Persimmon development towards the Barratts development, skirting Filter Bed Woods and Offley Wood, linking to the

footbridge that connects the whole site to the existing cycleway leading to town centre (blue dashed line)

B: 3m cycleway linking the Capricorn footpath/cycleway network to the "outside world" by way of a footbridge across Arclid Brook. This connects the Capricorn network to the existing footpath Cycleway leading to the town centre. The footbridge has "notional" approval via the Footpath Group and the Woodland and Wildlife, who have agreed that it is acceptable that this could be widened and improved to accommodate bicycles and wheelchairs.

There are planning applications that promote a vehicular access at this location. This should be resisted because the depth of the ravine at Arclid Brook would require an embankment of roughly 8 metres deep and 40 metres wide at its deepest point. The same volume of traffic would be deposited on to the A534 whether there are two access points as one. It also adds a right turn on to a mian road that is running beyond capacity.

C: A route running approximately North-South that connects the Barratt's development to the rest of Capricorn, leading to Church Lane and St John's Primary School.

D: Conversion of Footpath FP14 to cycleway. This enables access from Persimmon and the rest of Sandbach Heath to enter the site via Hawthorne Drive, leading all the way to Church Lane and St John's Primary School. It is acceptable from a cycling point of view that this is facilitated by means of estate roads so long as they are safe.

E: There is an existing Public Right of Way that links Wrights Lane to Footpath FP14 which is wide enough to accommodate a 3 metre wide cycle path.

# 7.4.7 Capricorn Photo Gallery



# 7. Route Summaries

# 7.5 Strategic Route 4: Congleton Road



### 7.5.1 Route Summary

Whilst Congleton Road is the primary vehicular route connecting Sandbach and Congleton, it is effectively impassable for cyclists, by virtue of the narrow, winding, tunnel-like stretch of road between M6 Junction 17 and Arclid lights.

From Hightown, Congleton Road heads north east, past the Scotch Commons car park and Sandbach Park on the right. Whilst it can be busy and congested, traffic is normally quite slow, because of numerous junctions, traffic crossings etc. From Sandbach Park, the road widens, passing Offley Road to the left, and the large housing estate bounded by Tatton Drive and Park House Drive on the right. There is a service road parallel to Congleton Road at the front of the houses belonging to this estate. The footpath is fairly wide throughout.

#### 7.5.2 The Strategic Case

Improvements to Congleton Road by way of segregated cycle lanes would make cycling into the town centre more attractive. The road is wide enough over much of its length to accommodate this, and the presence of the service road is a further advantage.

Such improvements would also, in conjunction with improvements to Crewe Road and Middlewich Road, afford safer access to the two secondary schools, and the railway station. The "Travel to Work" statistics for the Tatton Drive/Park house Drive estate suggests that very few residents consider the option of cycling to the railway station for their daily commute.

An important component in all this would be a safe cycling solution across the roundabout at the intersection of these three routes.

A "Desire Line" is shown above, in orange. This depicts the general direction of travel towards Sandbach High School and the Railway Station using the safe, quiet route described in 7.2, Cookesmere Lane Link. This is worthy of further consideration, as such a route is quite direct, whilst using existing off-road rights of way and estate roads. Some work would be required in upgrades and signage.

### 7.5.3 Scheme Appraisal Tool

Option Details					
Option Number:	Route 5				
Option Location	Congleton Road				
Option Description	Congleton Road is a relatively quiet road, heavy traffic uses the by-pass (Old Mill Road) to traverse the town. It serves the heavily populated Tatton DrivelPark House Drive estate, and forms the main route from these to education and employment centres.			<u> </u>	
				Critical Fail without this (x)	X
Scheme Option:				Primary school Impact (x)	X
Option Filtering					
Deliverability		Note:	lt includes t	he social / comunity acceptability	
Practical Feasibility					
Cost					
Option Appraisal					
Contribution towards the	e Study Objectives	Weig	hting Fa	otor	
<ol> <li>Route function - Sup.</li> </ol>	port Employment	•	1	2 Very High (+2)	
2 Route function - Sup	port Leisure	•	1	2 Very High (+2)	
3 Route function - Acce	ess to Education	•	1	2 Very High (+2)	
4 Route function - Acce	ess to Local facilities	•	1	2 Very High (+2)	
5 Contributes to unlock	5 Contributes to unlocking growth sites (housing and employment)		1	0 Neutral	
6 General deprivation:	General deprivation: Including household income (where cost of		1	0 Neutral	
7 Routes in areas which	Routes in areas which experience high number of traffic collisions		1	0 Neutral	
8 Maximise interchang	e opportunities with other modes	•	1	1 High (+1)	
9 Route in the proximity	of Air Quality Management Areas	•	1	0 Neutral	
Overall Performance ag	ainst the Study Objectives			+9	

#### 7.5.4 Possible Interventions

The route could be improved via continuous cycle lanes on both sides of road. At "pinch points" remove centre white line, signing indicating traffic priority from one direction and give way for the other direction

Suggestion: The section from Welles Street to Offley Road could have priority for south-eastbound traffic. That is because there is parking on the west side, northbound, which presumably will be retained. Alternatively or additionally, car parking could be removed.

The remainder of the route up to Parkhouse Drive or Old Mill Road could possibly be developed without the give way scenarios.

Any form of segregation via a cycle lane that is mandatory or via 'light segregation' would be desirable and might be possible westbound. For

examples of 'light segregation' please see Appendix 2 Photographs of Example Interventions contained in "Methodology for Creating a Town Cycling Plan Rev 0.2."

Another intervention would be extending 30 mph speed to junction with Old Mill Road

There are a number of possible interventions along this route to make it feel safer, some are described above. To establish what type of intervention is necessary requires a comprehensive survey, analysis of traffic volumes etc. Given the aspiration to improve this route for cycling, the support of Cheshire East transport professionals would be appreciated.

# 7.5.5 Aerial Views of Congleton Road

**Town Centre to Offley Road** 



Offley Road to M6 Junction 17



# **7.5.6 Congleton Road Photo Gallery**



