MATTER 7A/16748

Statement on behalf of Bourn Parish Council (Representations 59165 and 59159) in response to the Inspector's Matters and Issues for Joint Hearing Sessions, Block 2 in February 2015

This statement is submitted by Bourn Parish Council on behalf of the Coalition of Parish Councils, which was formed to oppose unsustainable major housing developments in the A428 corridor[1]. It responds to issues under Matter 7A (Strategic Transport Issues).

In order to address the Inspector's Strategic Transport Issues, we undertook a traffic survey in the A428/A603 corridor. The results of this survey are presented at Annex 1 and should be read as part of this statement.

We focus on the strategic choices made in the Local Plan to go for development of new settlements and, specifically, the decision to locate major housing developments in the A428 corridor.

Matter 7A (i): Are all essential transport schemes/improvements identified in the Plans and is it clear how they will be delivered?

In our view, all the essential transport schemes/improvements have not been identified in the Plans*:*

- *An all-ways interchange at the A14/M11/A428 junction to enable A428 eastbound traffic to turn south on the M11 to the biomedical campus and research parks south of Cambridge (the main area of employment growth in the next 10-20 years) was not identified in the plan and it is unclear how it would be delivered, if it were.*
- *The one major scheme that was identified for the proposed West Cambourne and Bourn Airfield sites (a dedicated bus-link from Caxton Gibbett to Queen's Road in Cambridge, with a park and ride scheme at or close to Bourn Airfield) is, in our view, not sufficient. It does not address the fact that most people living in Cambourne do not work in the centre of Cambridge and will continue to travel to work by car. The same is likely to be the case if West Cambourne and Bourn Airfield go ahead.*

All-ways Interchange at A14/M11/A428 junction.

The proposed housing developments in the A428 corridor are not feasible in the absence of an all-ways interchange at Girton/Madingley, enabling A428 eastbound traffic to turn right onto the M11 to access the planned major centres of employment growth south of the City of Cambridge. This is especially the case given (i) housing developments in St Neots and (ii) the plan to dual the Black Cat roundabout to Caxton Gibbett section of the A428, both of which will increase traffic flows along the A428.

At the moment, the main way to get from the A428 to the M11 is by driving down the A1303 (Madingley Hill). This is currently gridlocked every morning and evening during peak periods, with cars taking – on average - 30-45 minutes to get from the A428 down the A1303 to the M11 during rush hours. Because of this, most drivers leave the A428 and travel south through

[1] The **Coalition of Parish Councils** comprises: Arrington, Bourn, Caldecote, Cambourne, Caxton, Croxton, Elsworth, Eltisley, Eversdens, Hardwick, Knapwell, Longstowe, Madingley, Toft parish councils.

the villages of Comberton, Barton, Bourn, Hardwick and Coton to reach the M11. There are also increasingly long tail-backs through Barton village (on the A603 and B1046). It currently takes 10-15 minutes to travel the one mile through Barton (on the B1046/A603 or just on the A603). These delays are likely to get worse as a result of the proposed housing developments

SCDC expects most of the employment growth in South Cambridgeshire to take place in the bio-technology clusters south of Cambridge. If the extra 9,000 houses planned for St Neots (in Huntingdon District Council), West Cambourne and Bourn Airfield are built, the thousands of extra cars wanting to reach the M11, each morning, will have to use small village roads. This will lead to further bottlenecks on these roads and make life in some villages intolerable.

The solution to this problem would be to build an all-ways interchange at the A428/M11 junction, so that A428 corridor drivers do not need to use Madingley Hill or village roads to reach the M11 and their places of work. **This proposal is conspicuously missing** from the Highways Agency's A14 plans and **from the Local Plan**. **We thus consider the Local Plan to be unsound**.

We consulted the Highways Agency on this issue**.** It has not decided yet whether to include the Girton/Madingley all-ways interchange in its next round of route planning studies (2015-2020). Under the most optimistic scenario, even if this is done, and the scheme is found to be cost effective, the earliest that it could be operational would be the late 2020s.

The Cambourne-Cambridge dedicated bus-link proposed under the City Deal is inadequate

The first batch of proposed City Deal schemes, published in January 2015, includes an indicative investment of £87.1 million to provide a busway/segregated bus route from Caxton Gibbett to Queen's Road in Cambridge (City Deal schemes 5, 6 and 9). This is the equivalent of 59% of the total first batch City Deal expenditure of £147.1 million.

If we assume that half the proposed City Deal investment (i.e. £43.55 million) is required to serve West Cambourne and Bourn Airfield and assume that the maximum number of 5850 houses is built (2350 in West Cambourne and 3,500 in Bourn Airfield) this is equivalent to an investment of public funds equivalent to £7,450 per new house.

If this scheme would make it possible for most people from the new developments to get to work using sustainable transport, this might be considered a reasonable cost. But it will not do so.

The proposed scheme would only be of use to the small number people working in the centre of Cambridge. It would be of no use to the majority of residents who will commute to work in the science and research parks north and south of Cambridge or in other places in the district.

A dedicated buslink from Cambourne to the Queens Road in Cambridge, linked to more park and ride facilities, will not reduce traffic or congestion on the A1303 significantly because bus travel is an unattractive way for most people to travel to work.

This is because the spatial pattern of employment in Cambridge and South Cambridgeshire is dispersed across the city and district. While the bus link may be attractive for people working in the centre of the city (e.g., in the university, retail or offices) most people in South Cambridgeshire work outside Cambridge city centre and because of this will still use their cars. Going by bus to these scattered locations would be difficult, slow and inconvenient.

Proposed conversion of the A428 to a single lane carriageway at the new A14 junction

Another area of concern, which could affect the viability of proposed developments in the A428 corridor is the new A14/M11/A428 junction. Under the Highways Agency's plans, the A428 would be reduced from the current two lanes to one lane[2] to take it round the new junction before joining the A14 eastbound (to the science and research parks north of Cambridge). It is highly likely that this also would become seriously congested in peak hours.

Matter 7A (ii): Do the Plans adequately reflect the Local Transport Plan (LTP) and the Transport Strategy for Cambridge and South Cambridgeshire (TSCSC)?

This is a difficult question to answer because of the circular nature of the planning process used. The Local Plan argues that it is based on the LTP and TSCSC, while these transport documents appear to have been written to support and justify the proposals in the Local Plan.

There is, in our view, a fundamental weakness in the planning process. SCDC made the mistake of starting the Local Plan process by inviting developers to come forward with proposed housing sites, rather than taking a strategic view of the needs of the district. It is now in the invidious position of trying to retrofit and crisis manage a situation which it, itself, has caused.

In our view, the development of the Local Plan should have involved three steps (i) objectively assessing where future businesses and jobs will be located; (ii) siting housing strategically in areas close to jobs where sustainable transport to work (e.g. rail, bus, cycle and walking) is feasible and (iii) planning the transport improvements necessary to cater for the emerging spatial pattern of economic and housing proposed. If this had been done, we would now have a Local Plan that was fit for purpose.

Matter 7A (iii) Does the Transport evidence base comply with paras 54-001-20141010 and 54-011-20141010 of Planning Practice Guidance?

In our view, the transport evidence base put in the public domain by Cambridgeshire County Council (CCC) is totally inadequate. We spent time with CCC trying to obtain the data and analyses on which critical statements in the TSCSC are based but we were told they are not available. For example, the Local plan advocates large new settlements (e.g., West Cambourne and Bourn Airfield) rather than a more dispersed pattern of housing development across the district. This decision was based on analyses undertaken by CCC's consultants (Atkins) on the relative sustainability of these strategies in terms of transport (e.g., car trips generated). When we asked for the Atkins analysis underlying the decision to support schemes like Bourn Airfield we were told that the analysis had not been written up and no report as available.

Similarly, it seems that, in preparing the Local Plan and TSCSC, no attempt was made to carry out a detailed journey-to-work analysis of Cambourne. Neither the district or county councils have recent detailed data showing (i) specific places where Cambourne residents work, (ii) how they get to work (bus, car or bike) and (iii) how long this takes. Without this information. It is hard to see how the Local Plan could advocate for new housing development in the Cambourne area.

[2] The proposal is for a two-lane 'hatched' road round the new junction, on which the traffic would be reduced to one lane by cross-hatching on the road, to serve as a hard shoulder.

We decided to carry out our own traffic survey because we considered the transport evidence base on (i) traffic flows through our villages to be inadequate and (ii) the impact on bottlenecks on 'rat-running' through villages to be inadequate.

Matter 7A (iv): Will the Plans encourage the use of sustainable modes of transport?

In our view the proposals in the Local Plan to develop two new housing developments in the A428 corridor (West Cambourne and Bourn Airfield) will not encourage the use of sustainable modes of transport. On the contrary, **West Cambourne and Bourn Airfield schemes will encourage the use of non-sustainable modes of transport (cars).**

Most people living in the new A428 corridor housing developments are likely to work in the main centres of employment growth south and north of the City of Cambridge. The proposed dedicated busway to central Cambridge will not be of use to these people in getting to work. They will have to use their cars.

Moreover, car journeys to work from West Cambourne and Bourn Airfield will be long (c. 25-30 miles round trip). The Cambridge and South Cambridgeshire Sustainable Development Strategy forecasts that most of employment growth in South Cambridgeshire will happen to the south and north of Cambridge. Almost no new jobs are expected west of Cambridge, in the A428 corridor.

The nearest railway stations to the proposed developments are 10 miles away at St Neots and Royston, the guided busway is more than 6 miles from Bourn Airfield and cycling to work is not an option, since it will take over an hour each way.

Given that the Local Plan aims to encourage the use of sustainable modes of transport, we find it difficult to understand how SCDC could propose housing developments in the A428 corridor.

In our opinion, the Local Plan does not encourage the use of sustainable modes of transport.

1. **The proposed major new housing developments in the A428 corridor are located too far away from jobs (and centres of shopping, leisure, education and entertainment).**

   The National Planning Policy Framework (NPPF), paragraph 37 states:

   Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities.

   Cambridge and South Cambridgeshire is one of the fastest growing regions in the UK. This growth is being driven by hi-tech industries (IT and bio-technology), which are concentrated in the City of Cambridge and in science parks to the north and south of the city in South Cambridgeshire.

   Approximately 75,000 people currently work in South Cambridgeshire, of which 20,175 (27% of the total) work in hi-tech industries. The spatial concentration of employment is likely to continue in the future. The 2012 Cambridge and South Cambridgeshire Sustainable Development Strategy[3] identifies 18 major employment locations within

[3] *Cambridge and South Cambridgeshire Sustainability Strategy*, prepared by the Cambridgeshire and Peterborough Joint Strategic planning Unit, 2012.

South Cambridgeshire. The biggest increases in jobs are expected where the jobs currently are - to the north and south/south-east of the City of Cambridge.

Between 2011 and 2031, the total number of people employed in Cambridge and South Cambridgeshire is expected to grow by about 25% from approximately 175,000 to 220,000. Of the additional 45,000 jobs over 80% are expected to come in: (i) areas to the north and northwest of Cambridge, centred on the Cambridge Science Park and Cambridge Research Park; and (ii) to the south and southeast of the city, especially the biomedical campus at Addenbrooke's.[4] Only 2,800 new jobs (6% of the total) are expected in the A428 corridor. These new jobs in the A428 corridor will be offset by the loss of 1,600 jobs from the area, in 2016, when Papworth Hospital - one of the biggest employers in the west of the district – moves to the new biomedical campus at Addenbrooke's Hospital (to the south of Cambridge). As a result only 1,200 new jobs are expected in the western part of the district. **Why build houses where there are no jobs?**

In the period up to 2031 (and beyond), the main centres of employment, education and entertainment will continue to be found in Cambridge and areas south and north of the city to the east of the M11.

It is unsound to locate major housing developments in the A428 corridor since this will increase journey lengths, compared to developments closer to Cambridge and to the south of the city. This is contrary to the NPPF.

2. **The spatial pattern of development proposed in the Local Plan will result in unnecessary extra car journeys (compared to alternatives of building closer to Cambridge and nearer to jobs) and will impact significantly on carbon levels**.

The NPPF, paragraph 30 states:

Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

As was noted above, the SCDC Local Plan does not support a pattern of development that facilitates the use of sustainable modes of transport or which seeks to encourage solutions that support reductions in greenhouse gas emissions and reduce congestion**.**

The proposed A428 corridor development of over 5,000 houses, for example, would be located over 10 miles away from a railways station, six miles from the busway and while it should be possible to improve bus services into Cambridge it is highly unlikely that sustainable and frequent bus services to other parts of the district would be viable. (Currently, over 75% of people in Cambourne commute by car and only 5% by bus. They also travel further to work than people in other parts of the district[5]).

The A428 corridor developments, if they go ahead, would add 2500 tonnes of CO2 per year which represents 0.5 tonnes per new household. To put this in context, this is the equivalent of 10% of the average CO2 emission per UK household per year of 5 tonnes[6]. Detailed calculations are given in Annex 2.

[4] The Sustainability Strategy estimates 19,700 new jobs to the north (44%) and 16,700 to the south (37%).
[5] *Living in Camborne*. Cambridgeshire County Council, 2006.
[6] Department of Energy and Climate Change *United Kingdom housing energy fact file 2012*. It is decreasing by 1.2% annually.

This is totally unnecessary and could be avoided if new housing is developed in areas:

- close to main centres of employment, where most of the growth in employment in the next 10-20 years is expected to take place; and
- where it is possible for people to get to work using high quality public transport (e.g., trains, busway, bus services) or by cycling and walking.

This would be consistent with the National Planning Policy Framework (paragraphs 30 and 37). Such areas might include:

- the northern fringe of Cambridge and neighbouring areas of South Cambridgeshire (e.g., Waterbeach); and
- the southern fringe of Cambridge and neighbouring areas of South Cambridgeshire (e.g., Fulbourn and the Duxford/Hinxworth and the surrounding area).

These two areas are expected to account for 80% of the growth in employment in Cambridge and South Cambridgeshire over the next 10+ years.

Although development in the southern fringe of Cambridge might involve taking land from the green belt, this is permissible, where strong arguments on sustainable development can be made.

ANNEX 1

Coalition of Parish Councils

Traffic Survey

Introduction

1. The Coalition of Parish Councils undertook a traffic survey to assess current morning rush-hour traffic flows through the villages in the A428-A603 corridor west of Cambridge. We surveyed traffic at over 70 different sites, mostly in Late September and October 2014. The surveys were undertaken by trained volunteers. We surveyed at each site on either one or two days. We also recorded queuing times at key bottlenecks.

2. The survey methodology was designed by a specialist Transport Consultant[7]. We followed Department for Transport (DfT) guidance on traffic surveys. We carried out the surveys from 07.15 to 09.15 on either a Tuesday, Wednesday or Thursday morning in what the DfT considers 'normal' months for traffic surveys. We distinguished between (i) cars, motorbikes and light goods vehicles and (ii) heavy goods vehicles and buses, but, in this analysis we present data of combined flows.

3. The results of the traffic survey are shown on the map at Figure 1. Figures are rounded to the nearest 50 vehicles, unless otherwise stated.

Key Findings

4. The main findings of the traffic survey are summarised in this section.

5. Heaviest traffic flows. The heaviest traffic flows were on the A 428 eastbound, on the A603 eastbound just before the M11, on the B1046 between Comberton and the A 603 and on Madingley Hill eastbound. These are show in Table 1.

Table 1. Heaviest traffic flows

	Road	2 hourly flow (07.15-09.15)	Average hourly flow
	A428		
1	A428 eastbound just east of Caxton Gibbett	3,100	1,550
2	A428 eastbound just before the A1303 sliproad	4,300	2,150
	A603/B1046		
3	B1046 between Comberton and the A603 at Barton	1,300	650
4	A 603 eastbound, just before the M11	2,700	1,350
	A1303 – Madingley Hill		
5	A1303 Madingley Hill just east of the Coton turn	1,550	775
6	A1303 Madingley Hill eastbound just east of the M11	2,050	1,025

[7] Karl von Weber of LvW Highways Ltd.

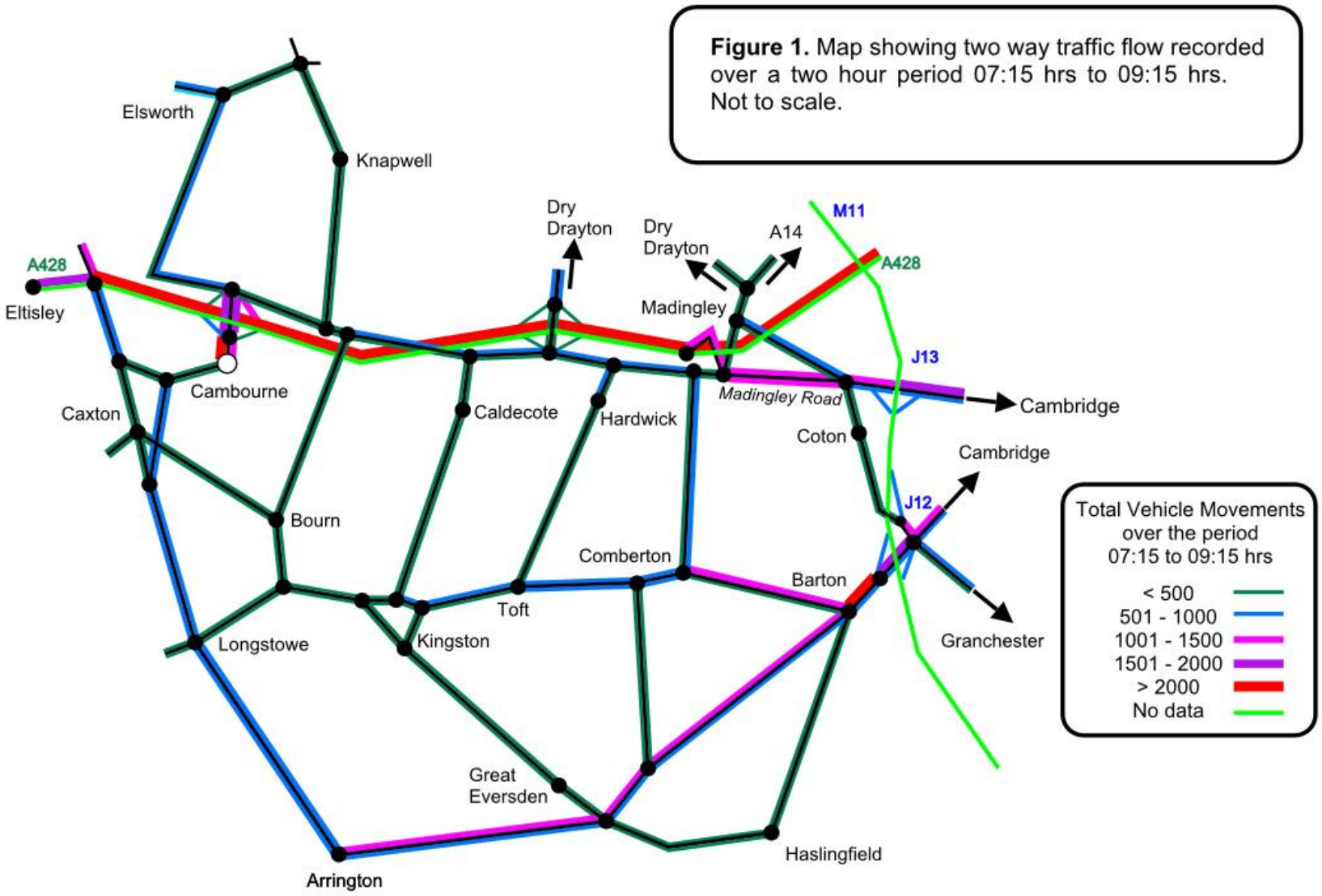


Figure 1. Map showing two way traffic flow recorded over a two hour period 07:15 hrs to 09:15 hrs. Not to scale.
Elsworth
Knapwell
Dry Drayton
Dry Drayton
A14
M11
A428
A428
Eltisley
Madingley
J13
Cambourne
Caxton
Caldecote
Hardwick
Madingley Road
Cambridge
Coton
Cambridge
J12
Bourn
Comberton
Barton
Toft
Kingston
Longstowe
Granchester
Great Eversden
Haslingfield
Arrington
Total Vehicle Movements over the period 07:15 to 09:15 hrs
< 500
501 - 1000
1001 - 1500
1501 - 2000
> 2000
No data

6. Traffic congestion. The heaviest traffic congestion is on the A1303 Madingley Hill and the A603/B1046 at Barton. It currently takes:

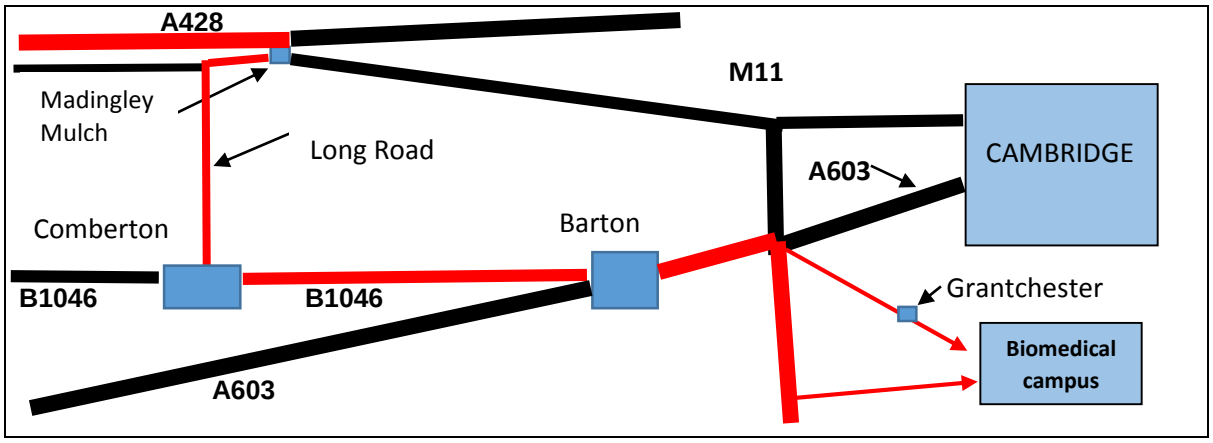
- Madingley Hill: 30-45 minutes to complete the 2.4 km (1.5 miles) from the Madingley Mulch roundabout to the M11 in the peak morning rush hours;
- Barton: 10-15 minutes to complete the 1.8 km (1.1 miles) through Barton on either the A603 or the B1046/A603 to the roundabout just east of the M11 during the peak morning rush hours.

7. Traffic diversions caused by inadequate infrastructure. There are two major infrastructure constraints in the area. These are:

- **The lack of an all-ways interchange at the A14/M11/A428 junction**, which means that eastbound traffic on the A428 (e.g., from the direction of St Neots and Cambourne) heading for the Biomedical Campus and other research parks south of the City cannot turn south on the M11. It thus has to leave the A428 at the Madingley Mulch roundabout and travel down Long Road to Comberton to join the B1046 to Barton and the A603 to get onto the M11, or travel through Grantchester, to the Biomedical Campus;
- **The A1303 from the A428 to the M11 (Madingley Hill),** which has severely limited capacity, resulting in long queues in the morning rush hours. As a result, motorists try to avoid the area by:
    - Queue jumping by 'rat running' through Madingley village to get onto the A1303 lower down, closer to the M11. Some 500 cars each morning do this (250/hour);
    - Avoiding the A1303 by driving south via Long Road to Comberton and then the B1046 to Barton in order to enter Cambridge or to the biomedical campus and other research parks south of the City. Approximately 90% of cars travelling down the A1303 (Madingley Hill) go into Cambridge. Only 10% turn right onto the M11.

8. Currently 900 cars (450/hour) travel down Long Road from Madingley Mulch roundabout to Comberton and the B1046. In Barton, 1300 cars (650/hour) from the B1046 join the A603 eastbound, giving a total flow just before the M11 of 2,700 vehicles (1,350/hour). Other vehicles also join from other directions, at the roundabout east of the M11. Of the total combined flow, 1,200 (600/hour) go into Cambridge, 900 (450/hour) drive through Grantchester and 800 join the M11 southbound, mostly heading towards the biomedical campus. This flow is shown in red in Figure 2.

Figure 2: Route taken by traffic using Long Road to avoid Madingley Hill



9. **Traffic flow through villages.** The need to find alternative routes to overcome the problem of inadequate infrastructure results in high traffic flows through many villages in the area. All villages report a significant increase in traffic over the last 5-10 years and in some villages the traffic is becoming intolerable.

10. The villages with the highest flows of through traffic are shown in the table below[8]. This shows the number of vehicles driving through each village from all directions. Since Comberton and Barton are both affected by two different streams of traffic, we have presented these separately.

Village	**Two hourly flow** (07.15-09.15)	**Average hourly flow**
Barton (A603)	2,300	1,150
Barton (B1046)	1,700	850
Comberton (B1046)	1,200	600
Comberton (Long Road)	1,200	600
Longstowe/Arrington	1,600	800
Toft	1,250	625
Elsworth	1,100	550
Dry Drayton	1,050	525
Madingley	800	400
Caxton	700	350
Bourn	600	300
Coton	450	225
Hardwick	450	225
Knapwell	400	200
Eversden	350	175

11. Elsworth and Dry Drayton through traffic is mainly travelling from the A14 to the A428, with some of it going onto the A603 and south Cambridge. The Madingley through traffic is mainly traffic trying to save time by joining the A1303 lower down Madingley Hill, close to the M11.

Implications

12. The proposed housing developments in the A428 corridor (e.g., West Cambourne and Bourn Airfield) will significantly exacerbate the current congestion and traffic flows through villages in the area. We estimate, from our traffic survey, that of the 1,800 cars (900/hour) from Cambourne, which join the A428 eastbound or the old A428 road, at least 500 (250/hour) cut down Long Road or through the villages to get to Barton and the M11.

13. The proposed West Cambourne and Bourn Airfield developments (a total of approximately 5,850 new houses (compared to the current Cambourne total of 4,400 houses) would thus increase traffic on the B1046 and A603 by a minimum by 650 new cars (325/hour). Given that the Cambridge and South Cambridgeshire Sustainable Development Strategy estimates that there will be an extra 10,500 jobs over the next decade on the biomedical campus and nearby research parks this is almost certainly a significant underestimate. It can be safely assumed, if West Cambourne and Bourn Airfield go ahead,

[8] *This was estimated from the balance of traffic entering and leaving each village.*

that a greater proportion of people in are likely to commute to work in the Biomedical campus and nearby facilities.

14. Add to this a general increase in traffic heading eastbound towards the new employment opportunities via the A603 and B1046, the queues at Barton are bound to get longer. Tailbacks of 30-45 minute, comparable to Madingley Hill today, are likely.

Cambourne commuters also leave the settlement to the South and join the A1198 southbound. Of the 800 vehicles (400/hour) travelling south on the A1198 through Longstowe we estimate 250 (125/hour) come from Cambourne. If West Cambourne and Bourn Airfield go ahead, this figure would probably more than double.

15. In our view, rather than building more houses in the A428 corridor, new housing developments should focus on areas in the south of the City and contiguous parts of South Cambridgeshire. There are three reasons for this:

- these locations are close to the new employment opportunities in the Biomedical campus (e.g., Papworth Hospital, Astra-Zenica and the nearby research parks);
- a denser population in this area would make an efficient and frequent bus service in the area feasible and make it possible for people to cycle and walk to work, thus supporting the planning policy of sustainable transport; and
- this would reduce the need to travel the 10-15 miles from the A428 housing developments, reducing adverse effects on carbon emissions and climate change, also supporting more sustainable development.

The infrastructure developments proposed under the City Deal are inadequate.

16. The first batch of proposed City Deal schemes includes an indicative investment of £87.1 million to provide a busway/segregated bus route from Caxton Gibbett to Queen's Road in Cambridge (schemes 5, 6 and 9). This is the equivalent of 59% of the total first batch City Deal expenditure of £147.1 million.

17. In our view this is an attempt by SCDC to mitigate its own planning mistakes proposed in the Local Plan – specifically West Cambourne and Bourn Airfield developments. If one assumes that half the proposed cost is for these two developments (i.e. £43.55 million) and that the maximum number of 5550 houses are built (2350 in West Cambourne and 3,200 in Bourn Airfield) this is equivalent to an investment of public funds equivalent to £7,850 per house.

18. If this investment made it possible to get people from the new developments to work using sustainable transport, this might be considered a reasonable cost. But it will not do so.

19. **A dedicated buslink from Cambourne to the Queens Road in Cambridge,** linked to more park and ride facilities, **will not reduce traffic or congestion on the A1303 significantly because bus travel is an unattractive way for most people to travel to work**.

20. The spatial pattern of employment in Cambridge and South Cambridgeshire is dispersed across the city and district. While the bus link may be attractive for people working in the centre of the city (e.g., in the university, retail or offices) most people in Cambridge and South Cambridgeshire work outside the city centre and will still use their cars.

21. The only way in which housing developments in the A428 could possibly be made more viable would be by constructing an all-ways interchange at the A14/M11/A428 junction, enabling eastbound traffic on the A428 to turn south on the M11. The Highways Agency has

considered an all-ways interchange at Girton/Madingley (A14, A428, M11) but, due to the high cost and other priorities, no planning/design studies have yet been undertaken. If a study were undertaken in 2015-20 and it proved cost-effective, the earliest the interchange could be operational is the late 2020s. This is far too late given the developments in St Neots (Love's Farm) and the proposed timing of West Cambourne and possibly Bourn Airfield.

22. In future, congestion is likely also increase on the A428 itself as the current two lane eastbound carriageway is reduced to one lane at the remodelled A14/M11/A428 junction.

Annex 2

Additional CO2 emissions from commuting

According to the 2011 census there were 0.998 commuting car journeys per dwelling in the Bourn ward [1]. Based on this figure, an additional 4989 commuting car journeys will be generated by building 5000 extra houses in the area.

Assuming the provision of bus services has a similar effect on car journeys in the corridor as it did when they were provided as part of the Cambourne development (10% reduction) this will equate to an additional 4092 commuting car journeys in the area.

On average residents of the Bourn ward work 213 days per year [2] and it has been shown that Cambourne residents travel an additional 10 km travel to work than the rest of South Cambs [3]. Assuming the residents of the new developments follow a similar work pattern, these figures combined with the additional commutes means that there will be 4260 km travelled each year by new residents of the West Cambourne and Bourn Airfield developments as a consequence of the developments being further from the main areas of employment in the region.

Assuming the new residents all have cars no older than 5 years (unlikely seeing as the "affordable housing" argument is being pushed) this will lead to **an additional carbon footprint of 2,521 tonnes per year**. Even if their bus plans achieve a 20% reduction in commuting car journeys, there will still be 1969 tonnes of carbon emissions generated each year by the extra 10km residents have to travel to work.

Notes

[1]. *Living In Cambourne,* Cambridgeshire County Council, 2006.
[2]. http://ukcensusdata.com
[3]. DfT Traffic Counts