Greater Cambridge City Deal

Notes of Call for Evidence hearings
9th December 2015

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3. Steve Gooding (RAC Foundation)
4. Nigel Brigham (Sustrans)
5. Edward Leigh (Better City Deal Campaign)
6. Antony Carpen
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Hearing 2, 14:00-17:00, 18th November 2015

1. Dai Davies, North Newnham Residents Association
2. Nichola Harrison
3. Jim Chisholm (Cambridge Cycle Campaign)
4. Cllr Thomas Bygott
5. Robert Sansom
6. Cllr Ed Cearns

Hearing 3, 09:30-12:30, 30th November 2015

1. Robin Heydon (Cambridge Cycle Campaign)
2. Andy Campbell (Managing Director, Stagecoach East)
3. Professor Stephen Glaister (Imperial College and Transport for London Board Member)
4. Robin Pellew (Cambridge Past Present and Future (CPPF))
5. Tom Byers (Hubl)
6. Nottingham City Council – Workplace Parking Levy (WPL)
7. Peter Wakefield (Rail Futures East Anglia)
8. Dr Gabriel Fox (Coton Parish Council)
Hearing 1
09:30-12:30, 16th November 2015, Cambridge Central Library

City Deal Executive Board and Joint Assembly attendees

Executive Board
- Jeremy Sanders, University of Cambridge

Joint Assembly
- Cllr Roger Hickford, Cambridgeshire County Council
- Cllr Noel Kavanagh, Cambridgeshire County Council
- Helen Valentine, Anglia Ruskin University
- Cllr Tim Bick, Cambridge City Council, CHAIR
- Cllr Nick Wright, South Cambridgeshire District Council
- Sir Michael Marshall, Marshall Group
- Andy Williams, AstraZeneca
- Cllr Dave Baigent, Cambridge City Council
- Apologies: Cllr Lewis Herbert, Cambridge City Council

Speaker 1: Stephen Joseph (Campaign for Better Transport)

Stephen Joseph stated that there are already some good plans within the Greater Cambridge City Deal. He believes that new developments should reduce car dependency by designing in facilities to encourage public transport, cycling and walking. He said that sustainable transport can help to encourage economic growth, particularly investment in improved rail infrastructure. He also advised that the forthcoming Buses Bill (announced in Queen’s speech) may provide new powers through devolution deals to provide better and longer term bus network planning and opportunities for integrated ticketing. There may also be powers for franchising bus networks. New forms of funding for transport improvements should also be pursued e.g. Tourist Tax and Regional/Sub-regional partnerships.

Questions:
- Q. What is the role of measures specifically designed to ‘persuade’ (the need for measures that move people towards sustainable modes)
- A. Greater Cambridge has an opportunity to ‘plan in’ sustainable travel
- Provide the options from first occupation
- Design it in
- Fiscal measures (eg. Workplace Parking Levy, Congestion Charging)
  - WPL especially ideal for Cambridge
- Q. Majority of travel is from existing areas, not new development – what can we do for this?
• **A.** focussed on new development due to the growth planned and how this can be designed to be less car based

• Need to look at rail for this

• **Q.** Issue of getting people in from the villages. A lot of the solutions are taxes on growth and won’t aid growth. What about Nottingham?

• **A.** Rail can help on some corridors more than others

• Buses can help in the other corridors

• European examples: much better interchanges outside of cities in rural areas) which resembles rail more

• Taxes work only if they buy you the High Quality Public Transport (then they add to growth)

• Nottingham - jury still out. Trams only just opened so not full picture

• Early signs are quite positive. Nottingham City Council speaking on 30/11/15

• **Q.** Haverhill to Cambridge railways – rail comes up a lot, why support this over other modes? What is definition of VfM for rail as it’s so expensive

• **A.** Not done a lot of work on Haverhill to Cambridge, but support it, if possible.

• Rail is seen by people as part of national network (through ticketing etc.) buses are not

• Support better links to Haverhill as it is a largest town without a rail link (RH: Also without a strategic road link!!)

• **Q.** Will the new Buses Bill be of great benefit to Cambridge?

• **A.** Allows for longer term network planning

• Allows for better integrated ticketing (multi-operator, maybe even multi-modal too)

• Allows franchising powers

• Cornwall going to use these powers to create integrated timetable and ticketing – worth a look into

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**Speaker 2: Jonathan Barker & Prof. Marcial Echenique**

Professor Echenique, who was involved in the design and creation of the County Councils CSRM model, gave details of the Cambridge Futures work that has been undertaken. More details on this can be found here:


A comprehensive solution is required to tackle the city’s transport issues, including:

• Encouraging cycling and walking

• Improving public transport and bus tunnels so that buses are not held up in congestion

• Orbital road capacity, particularly to east and south of the city

• Road pricing – this would help to pay for investment in bus tunnels and other improvements
Questions:

- **Q.** what would you choose if you couldn’t do all?
- **A.** Need to do the road pricing to switch people into the buses. Without Road pricing, not enough people would switch to buses.
- Buses and road pricing must be done together, as need an alternative in place
- Workplace Parking Levy not a good solution – would encourage through movements
- Congestion Charging the only option
- **Q.** would road user charging would cover costs of Public Transport? Make it free or reduce costs?
- **A.** Yes. Absolutely.
- **Q.** Is there anything that has altered the results of your work, given it is a few years old
- **A.** Not worried as development is coming forward as expecting, but timing is a bit off
- Technology is the game changer. Advances in recent years – this could help though, particularly for setting up a road pricing scheme and potential for driverless cars linking P&R sites.

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**Speaker 3: Steve Gooding (RAC Foundation)**

A lot of good data about transport issues in the area is already available and it is essential that this is used to inform future thinking and plans. He also believes that a combination of measures is required to tackle the city’s transport issues. It is particularly important to think about the balance between commuter and commercial traffic, suggesting that commercial traffic should not be discouraged and that commuter traffic should be encouraged to use sustainable modes. He stated that increased or new parking charged are a poor second to congestion charging, but may be more acceptable to the public. He advised that it may be worth investigating congestion charging for Cambridge, but it requires significant investment in hearts and minds, while operating costs can be high.

Questions:

- **Q.** Car sharing – how can you encourage this?
- **A.** availability of somewhere to park at the destination (which you wouldn’t otherwise have) is a pretty clear win/advantage
- Beyond that it is very hard to enforce High Occupancy Vehicle Lanes.
- **Q.** did Congestion Charging in London produce the sums of money that could be suggested earlier (by Cambridge Futures)
• A. Could be that London scheme was overly engineered in beginning (too many cameras etc.) – whereas more modern tech (ANPR) and smaller area could be cheaper
• Keeping the charge simple is easier but varying charge by time etc. could make more money
• Need to be cautious about how much money can be raised
• Q. Any advice/lookouts for a similar method for Cambridge (lessons learned)?
• A. Centre of London very employment focussed and therefore can be catered for by mass transit more easily. Also good PT availability. Cambridge maybe not so?
• Think about interaction of residents and commercial – are we exempting residents from charge
• Q. Cambridge different to London as a lot of people go in and out in a day more than in London. What is your suggestion if you deter people coming in?
• A. The data on Origin & Destination is key – understand why people make in and out trips
• Any solution will alter the trip patterns people make. Need to get the right balance
• Q. What do you mean hearts and minds for road pricing/CC?
• A. Raising money and tackling congestion as goals is controversial
• Politics behind it tough.
• Benefits of package need to be drummed into people
• Keep the ‘this is what Cambridge will be like message’
• Q. Hydrogen cars in Japan. When do you think alternative fuels for vehicles may change?
• A. pace of development for alternative fuels is good
• Hard to know exactly when
• Challenge is availability of refuelling
• Petrol and diesel also improving performance
• Buses can be retrofitted with cleaner fuel
• In all vehicles, they work best in smooth flow. Stop start is very bad for emissions.
• Q. (audience) Do motorists like P&R? What is time penalty seen as?
• A. No data with me. But there is a penalty (not total control of destination)
• But reliability and location of sites is key
• 3 key messages:
  • Is Cambridge going to be a clean air zone? If so what are the policies for achieving this
  • Don’t forget stewardship (look after the existing and future network – maintenance key)
  • Do start with good data

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Speaker 4: Nigel Brigham (Sustrans)

Mr Brigham stated that not all traffic problems in Cambridge are caused by those driving into the city. People living in the city who drive to work also cause congestion. Provision for sustainable transport should be designed into new developments and more investment should be into longer distance cycle routes, particularly between villages – the cycleway along The Busway was quoted as an excellent example of this. A coherent cycle network will help to encourage more people to cycle and fewer people to drive.

Questions:

- Q. Are there figures that show cycling numbers (and who would use it, what this would do etc.). Need hard facts and figures.
- A. Entirely appropriate to be aiming for 40% cycle mode share and this would have benefit in modal shift away from cars
- Always going to be a limit to numbers further out in rural areas
- It’s about creating networks
- The number of people cycling into Cambridge is increasing
- Q. Personalised Travel Planning – who uses it and what effect does it have?
- A. typically a 10% modal shift.
- Some small examples locally – especially at new developments
- about providing info to people about alternative travel
- Q. any info on ages of cyclists and distances people will travel?
- A. Distances underestimated, especially locally, example of Busway cycle route
- No data on age profile to hand
- Q. Need evidence to back up case
- A. There is a lot of evidence out there, just not got it here. Can share. CCC also collects evidence.
- Q. we are building more cycleways but maintenance can be neglected. Do Sustrans have an idea about a figure an LA should spend on cycleway maintenance?
- A. Should be proportionate to modal share
- Can a road charge help with this? Some sort of locally generated revenue
- Q. A 10 mile cycle way won’t be used until first mile and last mile are safe
- Q. Do you/Sustrans have a view about the more ‘stick’ or ‘ nudging’ measures have in switching modes?
- A. It is huge. Make it so it is not worth the effort of driving. Less of a choice, shift the balance towards sustainable modes
Speaker 5: Edward Leigh (Better City Deal Campaign)

Mr Leigh’s proposal was based on smarter travel management in Cambridge through the upgrade and integration of traffic signals. The main element of the proposal is queue relocation on the outskirts of the city in the morning peak alongside special bypass lanes for buses and potentially other vehicles to bypass the queues into the city. These bypass lanes would likely comprise of two 500m long lanes on each main radial. Access to the bypass lanes could be charged e.g. to taxi companies or logistics operators as a way of raising some revenue for transport improvements. Other measures would also be required to encourage fewer people to drive and more people to use sustainable modes.

Questions:

- **Q.** How does this take care of internal traffic within the city?
  - **A.** Needs complementary measures. Have a list of these measures (inc making it more difficult to drive than cycle, WPL, school transport coordinator, incentivise employers to have secure and convenient cycle parking)

- **Q.** any precedent for this?
  - **A.** Zurich (best example), Brunswick, Potsdam (Germany)
  - Us and Southampton both use elements of it
  - Often used for reducing pollution
  - Gating tech has been around at least a decade

- **Q.** how about getting out the city? Congestion often worse in PM peak
  - **A.** Doesn’t deal with this specifically – theory is less driving in, less driving out
  - May be that a congestion charge or something is needed to complement this

- **Q.** how does the system alter to differing scenarios?
  - **A.** Needs to be given ‘scenarios’ to be programmed in or can be manual programming

- **Q.** Cannot charge businesses. City Deal is about encouraging growth
  - **A.** Businesses want congestion charging – they will pay a fee to save time (it is a lesser charge than the cost of congestion)

- **Q.** Need to get right balance
  - Cheaper to administer than a congestion charge

- **Q.** How will we ensure there are no queues on the Strategic Road Network
  - **A.** By putting the queues on the edge of city helps reduce serious queues emanating from centre of city
  - Encourages modal shift – this is the key.
  - You choose – queue in car or get on bus that misses queue

- **Q.** Most of congestion is on outskirts not the centre. This will cause dangerous issue on the Strategic Road Network.
  - **A.** Build road space to fit queue on outside of the city
  - Issues at junctions further in cause queues experienced on edge of city
• Ultimately need to reduce number of people driving
• Not a silver bullet but a good coordinated step forward
• Q. Smarter traffic management attractive, but there is an issue in how we are being fair to people in and outside of the city. This idea seems to be more beneficial for those in the city
• A. Not a solution out there that won’t make someone change their travel behaviour
• Needs to be fair
• Queue is relocated, not extended. Not penalising those outside.
• Smarter Traffic Management is beneficial and not abortive.

Speaker 6: Antony Carpen

Mr Carpen suggested that much more engagement is required with the large young population in the Cambridge area. He also believed that investment in rail infrastructure should take place, with the reopening of the Cambridge to Colchester rail line. This could then link up the two main ARU campuses.

Questions:

• Q. Why mention Haverhill to Cambridge railway in particular? Usage figures?
• A. Don’t have figures. Focussed on Haverhill as the Rail Haverhill Group have a substantive amount of research
• Link to two ARU campuses
• Q. Not done much with students yet, but agree they need to

Speaker 7: Peter Wright (Transport for London)

Mr Wright talked about the experience of congestion charging in London. He advised that while the London congestion charge was expensive to set up and run, it does now raise money for transport improvements. He also stated that congestion in London would be much worse if the charge were not in place. His experience shows that clear objectives are needed if a congestion scheme is to be introduced. Furthermore, strong leadership, investment in public transport alternatives, excellent project management and a strong and sustained public information campaign are fundamental to the successful introduction of congestion charging, as London’s charge showed.
Questions:

- Q. Does it raise money?
  - A. It does. It took a few years but as costs of running scheme lessened, but in real terms it does raise around £100m p/a after operating costs
- Q. Volume of traffic dropped initially. Did people alter travel behaviour? Did non CC traffic increase?
  - A. No real displacement in terms of time of day. Main alteration was residents and commuters switching mode
- Congestion charging was cheap compared to parking.
- Some change in business behaviour, but small as they saw benefits.
- Not a tax on businesses, as it saves time.
- Increase in public transport was essential – 30% inc in bus investment
- Q. How did you decide proportion of total budget to go into project management/back office?
  - A. the time of the congestion charge going in had a different landscape financially. Message was 'spend what you need to'
- Costs come down with online resources recently
- Procurement costs high
- Q. technology that can support congestion charging developed quite fast recently. Any thinking about flexible charging in London? Make it less rigid?
  - A. London doesn’t have a peak that is massively above inter-peak and off-peak times, ultimately it is congested all the time. Being flat rate and simple brings benefits
- Q. is there anything in terms of scale of Cambridge v London that gives concerns about a congestion charging scheme?
  - A. All people need to be affected (allowing for disabled drivers, emergency vehicles etc.)
  - Investment in alternative modes key – ways of encouraging these modes is also key e.g. free travel for a month
- Q. London has existing infrastructure. Any advice in increasing bus patronage?
  - A. Any new development gets developer funding towards investment in buses. Need to design in for future even if the demand isn’t there at beginning.
- Q. Congestion Charge should be for everyone – does that mean cameras everywhere? Or a blanket charge?
  - A. London have cameras on edge of zones and within
- Q. How extensive are residents CPZ?
  - A. Depending on where you are, it alters. Different London Boroughs have different methods.
  - TfL cannot introduce one and cannot raise revenue from parking
  - Encourage cycle parking above car, then for LB’s to implement (through policy)
  - A lot of car free, Low Emission Vehicles etc. in policies too
Speaker 1: Dai Davies (North Newnham Residents’ Association)

Mr Davies’ presentation was primarily concerned with the area around North Newnham in Cambridge, highlighting that the area was a major commuter parking destination, with around 450 cars per day parking in a limited area. Mr Davies noted that the capacity and loading of the vehicles in the streets in North Newnham was similar to that at the Madingley Road P&R site and was clear that the cars arrive in the morning peak and depart in the evening peak and therefore very likely to be commuter vehicles. He emphasised a need to prioritise public transport solutions, noting that relocating the P&R to the Madingley Mulch area and increasing the capacity could help reduce traffic on Madingley Road, potentially removing 1000 car movements a day out of the city. Mr Davies’ presentation set out a need to control commuter parking, investigate innovative forms of public transport and use a congestion charging mechanism to reduce the overall amount of traffic.

Questions:

• **Q:** Why was moving the P&R to another location seen as a shorter term approach rather than a long term approach?
  
  • **A:** The most obvious proposal on the table was the P&R; there is a distinguished general need to control parking.

• **Q:** How do you know that the 450 cars that park in the area were not parking there beforehand, when the P&R was free? As if this is the case these 450 cars won’t willingly move even further away to the proposed park and ride site.
  
  • **A:** The idea is to throttle parking in general and displace 450 car journeys to the P&R.

• **Q:** Where is the evidence that these vehicles are commuter vehicles?
  
  • **A:** Most arrive at peak hours and walk or cycle into the city and most residents have off-road parking.
• Q: What is the total traffic flow?
• A: Not sure. The main concern is over the morning peak hour traffic. During school holidays this peak is much less pronounced.
• Q: How would you control the parking? Would it be 24 hours?
• A: No answer to this as yet, everybody in the Residents’ Association represented has a different opinion on the matter, but the point is that people in the Residents’ Association are willing to consider the idea of reduced parking on roads.

Speaker 2: Nicola Harrison (Former City and County Councillor)

Ms Harrison noted the Transport Innovation Fund (TIF) programme which Cambridgeshire County Council used to explore congestion charging as a tool for tackling congestion in 2008/9. This programme explored how congestion charging would affect residents and businesses in Cambridge. Ms Harrison stressed that she considers congestion charging to be an opportunity and not a threat and illustrated how it would apply to different people travelling in and out of Cambridge using 3 case studies of ‘real people’.

• Mark:
  o Works as a builder – drives in and around Cambridge for work and finds that the congestion wastes a lot of his time and money
  o Has to drive children to social gatherings as the bus services are poor in the evening, and they are unable to get themselves there
  o £5 congestion charge would deter road users and pay for infrastructure and service improvements and therefore will help save a lot of time and money through wasted fuel and wear and tear, and provide opportunities.

• Kat:
  o Single mum who works in Cambridge. She has to take her child to the child-minder’s before work and then commute into Cambridge.
  o She cannot take the bus as it is unreliable and slow, but it is difficult to commute, and more hours are being spent at the child-minder which is more money and less time with her child
  o With a congestion charge of £5/day she would break even, she would save time and possibly travel to work by bus rather than car due to improved journey time and potential infrastructure improvements

• Shaun
  o Had a difficult start to his life, and has now gained an opportunity to work in the city in the evening, however as there are no evening buses, he cannot get there.
  o A congestion charge would help pay for this bus service and help promote opportunities.
Ms Harrison continued with the success of the Stockholm congestion charging scheme, which 6 months after it was implemented, a referendum voted in favour on keeping the charge, and that the TIF programme in Cambridge in 2008, gained a 59% acceptance vote for a congestion charge. Ms Harrison stressed the desire and opportunity to improve the whole transport system, to reduce traffic congestion and improve bus services.

Questions:

- Q: What is the aim of the congestion charge? Is it to stop commuters coming into the city, or to improve public transport?
  - A: Both. The two go hand in hand.
- Q: It could be disputed that the two go hand in hand
  - A: In London, a 10% drop in congestion was found immediately after implementation of the congestion charge. 10% is a huge difference in itself.
- Q: What is the best model for congestion charging?
  - A: There is still a huge amount of work to do to see how it would work and refine peak hours, the principles of the scheme and how much the charge would be. There will be a paired pain and gain.
- Q: Is it going to make any money? Will it fund large infrastructure, and how can you ensure that the money is targeted?
  - A: Yes it can make money, £30million is made in London each year; this is 10x more than is spent on bus services in Cambridge. There has been lots of other experience worldwide. Revenue could be controlled by putting it in some sort of community trust, which would give the public confidence that it would be spent on meaningful transport improvements.
- Q: Residents are exempt in the London scheme, which reduced the congestion in the long term, but returned to pre-congestion charge levels thereafter. Would Cambridge need other measures as well?
  - A: In London there are few residents living in the congestion zone and therefore this strategy would be ineffective in Cambridge. It has always been the objective for a cost neutral scheme. A good bus service is needed.

Speaker 3: Jim Chisholm

Mr Chisholm set out his past involvement with traffic modelling and talked about non-linear traffic flow delay relationships - to reduce congestion, only 1 person in 20 needs to travel by bus and 1 person in 50 needs to travel by bicycle. He noted a requirement for better traffic regulation and improved cycle routes for a modal shift to occur and to provide the capacity for more people to use sustainable modes. Simple improvements such as more frequent/ quicker and less expensive bus services and more cycle routes would help to reduce congestion.
Questions:

- **Q:** You mentioned a no cycle day in the presentation. What effect would this have?
  - **A:** Many motorists believe that cyclists are to blame for the delay in their journey. This would act as a form of demonstration to get people onto their bikes by showing how more cars actually congest the city considerably more.
- **Q:** Are there too many buses in the city centre now?
  - **A:** The service turnover is too slow in Cambridge. A 5 minute waiting turnover is much longer than the 1 minute turn over in London. The dwell time of buses is the major issue.
- **Q:** What might the impact be of a park and bike type scheme, which provides safe lockers for overnight bike storage or the introduction of “Boris bikes”?
  - **A:** Look to the success of the University shared bike scheme and to Denmark which has bike racks at bus stops. Also consider the impact of Park and Ride on traditional bus services and reduction of service provision.
- **Q:** We need to future proof the transport system, 10% is good for now but with 66000 more people in Cambridge and 200000 in Cambridge and South Cambridgeshire. What will be good now, compared to later after an increase of 30%.
  - **A:** This is a virtuous circle. Congestion will be reduced as the use of bus services increases. Interchangeable tickets, which allow travel up to one hour, are the answer. There is a need to influence people to become one car families rather than multiple car families. There are many things that we can fix to make services more reliable.
- **Q:** How many control points and interventions would be required to implement flow control and create the “school holiday impact”?
  - **A:** Close off side roads etc. and make car journeys more difficult.
- **Q:** By controlling the flow of traffic from the outside, are we restricting people from getting in?
  - **A:** It is a balancing of people who are queuing – it is an extension of permeability. It will require a system on a map.
- **Q:** By influencing increased cycling and pedestrian movements, the increased mix could be dangerous. How will the behaviours of cyclists be controlled? There is also a congestion of cyclists in Cambridge.
  - **A:** Parking in the centre is being improved, and compared to 50 years ago the problem is much smaller. However there is more to be done for off-street parking for cyclists. Additionally when there are more cyclists, the speed of cyclists reduces.
Speaker 4: Cllr Thomas Bygott

Cllr Bygott set out a proposal for a Cambridge and District Railway, suggesting it would be the cheapest and lowest risk solution to tackle congestion. His proposal was for local services to run independently of long distance services which terminate before London and that new stations could be built to serve local communities. Cllr Bygott suggested that by separating short and long distance trains, a separate timetable could be constructed and that difficult timetabling issues could be avoided. His timetable configuration would mean that the track would not need to be altered.

He noted that Cambridge is the most expensive area for new stations to be built and therefore more traffic should be channelled through these lines. The services could be joined up with the bus network and smaller more frequent trains with places for bikes could run, i.e. opposite, local agenda to those travelling into London.

The District Railway could use an oyster style card, similar to that used by the busway for use on the busway and park and ride and “Boris bikes”.

Cllr Bygott noted that the most congested area is between Bishops Stortford and London and shortly after Cambridge due to the staggering of fast and slower trains and that capacity issues would need to be addressed in this area, but that elsewhere on the local rail network there is a lot of additional capacity which could be used.

Questions:

- **Q:** If this is such a good idea, and the demand is there, why aren’t rail operators doing this already? What is the hidden issue? What is required?
  
  **A:** Timetables are all based around London. Bristol is creating a metro with their city deal funding and London has created the over ground to separate out commuter distances, so it is already happening elsewhere. Discussions are required with Network Rail to discuss what would be required to make it happen, and how the trains would turn around.

- **Q:** Many lines which were mentioned to be reinstated have been built over, which therefore increases the cost of the scheme. Also other considerations need to be thought about, such as how people will get to the stations - car parks will need to be built.

- **Q:** It was said at the beginning of the presentation that this would be the most popular and least cost option. So what is the cost?
  
  **A:** The core scheme is the cheap option. Without 4 tracking, the cost is about £100 million. We should make the most of the tracks.

- **Q:** What is the entry cost?
  
  **A:** A 4 track station is £15 million; a 2 track station is £6-10 million. The orange line has 4 sets, the green and blue lines have 3 car sets with a cost of £22 million.

- **Q:** What are the impacts on the aims and objectives of the city deal?
Mr Sansom outlined that a key focus over the next 10 years will be 1) individual healthcare (NHS funding reducing, obesity rising, and reduced healthcare premiums mean that daily exercise is necessary) and 2) autonomous vehicles (these are driven by technology not government – example of the first Apple phone being only in 2007 and now everywhere. It is thought that autonomous vehicles will be widespread by 2030 and the road will be made up of a mixture of autonomous and mix mode vehicles. Tesla Model X is an example of an increased capacity autonomous car.)

Mr Sansom stated the implications for the City Deal to be first class walking and cycling infrastructure, to plan ahead for autonomous vehicles, and allow (both public and private autonomous vehicles) to coexist with buses; that alongside congestion charging, these autonomous vehicles will be set up at interchange sites, such as Park and Ride sites and that people will be grouped by destination and 3/4 will fill each vehicle via a more specific route into the city. His proposal is to remove all conventional buses from the city centre and change for hybrid/ electric cars and that shared occupancy vehicles would be able to bypass traffic.

Questions

- **Q:** What is the core gain for being autonomous?
  - **A:** They are a shuttle service from the Park and Ride and carry 3+ people, and then return autonomously. This is alongside a congestion charge or a gating scheme.
- **Q:** How will autonomous vehicles be insured? Are there different sizes of autonomous vehicles?
  - **A:** There will be a sharing of liability by the car company. More efficient use of space rather than a bus.
- **Q:** What is the benefit of electric vehicles? They require heavy batteries and charging points?
  - **A:** The further out of the city the Park and Ride sites are, the more car journeys to multiple different destinations will need to be made to take people to where they want to go. How would this work?
  - **A:** A control system will need to be implemented which is not a big problem with distances being travelled in Cambridge. 3.5 million Park and Ride journey are made each year, 40,000 in the peak hours which is not a huge number when talking about the morning peak.
- **Q:** What is the incentive of moving out of the city?
  - **A:** It will be better than a bus system, closer to where you want to go and a quicker service pick up.
• Q: Cambridge has a future capacity, what difference would this make to congestion now compared to the future?
• A: This scheme will involve shared occupancy vehicles.
• Q: What is the difference of the expected impact between bus and the automated vehicle?
• A: Flexibility.
• Q: Is this being used anywhere at the moment?
• A: No, it will first be implemented in Switzerland next year.

Speaker 6: Cllr Ed Cearns

Cllr Cearns set out the case for congestion charging stating that 1/3 of all activity in the county is carried out in Market Ward and that there needs to be a holistic approach to the congestion issue and one which is equitable and simple. His support for a congestion charge would see bus services funded and incorporate innovative solutions to make people think and move in a different way to current patterns, removing the artificial distinction between users. Cllr Cearns concluded that a charge needs to be about opportunity, and not only a stick, that there needs to be an incentive rather than just a flat ban. The charge must however be equitable for all residents in both Cambridge and South Cambridgeshire.

Questions:

• Q: What price would you put on a congestion charge?
• A: Would need further work but exceptions like lower income, personal situation and look to see what has worked elsewhere, like in London.
• Q: What would your residents think of “No free parking anywhere in Cambridge”?
• A: Residents parking scheme - this is not the same situation, as this links to when you want to use your car.
• Q: Within the Market Ward there are 4,000 – 5,000 public sector charged spaces and University spaces that aren’t charged for. How would this be addressed?
• A: Everybody needs to be part of the solution – big employers need to be part of the solution.
• Q: Rather than the level of congestion charge being acceptable to everyone, shouldn’t it be unacceptable?
• A: It’s got to be a step change, but also it needs to be voteable. It needs to be high enough to get people to think.
• Q: What about £15/day?
• A: It is difficult to put a finite amount on and will have to be a justifiable figure.
Speaker 1: Robin Heydon (Cambridge Cycle Campaign)

Mr Heydon’s proposal was based on the principle of charging road user’s to encourage them to change route, mode or the time they travel. This would take the form of a ‘congestion point charge’ or ‘road fare’, whereby drivers would be charged for passing specific problem points on the road network, rather than a charge on all routes. He stated that all routes should be classified as either ‘access’, ‘distributor’ or ‘through’ routes to help determine how each route should be used. He believes that segregated cycling facilities should be provided on all main roads, with safe junctions and the removal of side junctions. Furthermore, he noted the requirement for much more cycle parking, particularly in the city centre, at employment sites and at transport interchanges. A comprehensive rural and city cycle network should be developed alongside Park & Ride a Bike provision. Finally, he proposed that a ‘bicycle account’ be produced which would set out future plans for cycling as well as sending out the message that Cambridge is the cycling capital of the UK.

Questions:

- **Q:** Are you proposing to charge cyclists?
- **A:** Only if we’re charging buses too, it would be counter-productive
- **Q:** Buses weren’t mentioned when you talked about road widths – what is your vision?
- **A:** Could take out more of verge, so could have bus lanes in one direction. Perhaps look at Tidal bus lanes (but not tested)
Q: cycle parking can’t go underneath market square, it would be too expensive.
A: Where can cycle parking go? We need to find the spaces.
Q: How much would all this cost? (broad terms)
A: Not sure on congestion charge. Segregated cycleways and bus lanes – can cost £20m on each radial – not saying all needs to be done next year, but can we have a plan/ambition for the next 20 years?
Bicycle account – Cambridge Cycling Campaign will help.
Q: You didn’t mention rail that much. Real issue with bikes on trains. What do they do elsewhere? (E.g. Netherlands)
A: Netherlands – no bikes on trains during the peak. Out of those hours they have an open space on train where a lot of bikes can be placed safely. In Denmark you buy a bicycle ticket which assigns a seat for the bike.
Q: Congestion point charging. This would cause people to change routes. Would this just shift congestion to another route and not solve the problem?
A: Yes, always an issue regardless of what we do. People may consider the time saving worthwhile or they may switch mode. Singapore change pricing structures every 2 months to try and react to situation. Point is to increase speed of buses and provide space for cycling. Deal with congestion elsewhere if required. This system could be trialled.
Q: How would people know which road were charged, could this cause confusion?
A: Need excellent communications.

Speaker 2: Andy Campbell (Managing Director, Stagecoach East)

Mr Campbell stated that congestion is a real problem for Stagecoach, with the average speed of buses across the county reducing from 13.8mph ten years ago to 12.2mph today. Buses experience major delays in the city centre and on arterial routes into the city – for example, the bus journey time between the city centre and Addenbrooke’s can vary between 15 minutes and an hour. He believes that the introduction of Park & Ride, the Cambridge Core Traffic Scheme and The Busway were proactive measures to tackle congestion. However, he stated that in his opinion nothing had been done to help buses since The Busway opened. In fact, he believes that recent measures such as new cycle lanes, additional traffic lights and the Park & Ride parking charges have actually increased delays and journey times. Despite cuts to tendered services across the county, Stagecoach operate five additional buses at peak times to try and maintain a service, and have made other changes to the Citi bus network. Mr Campbell stated that with the growth planned for Cambridge and South Cambridgeshire, a radical solution is needed. His view is that a congestion charge should be introduced as this would provide a revenue stream to improve public transport in the future. He also supported the need for a railway station at Addenbrooke’s. He does not support the need for bus tunnels, however, would not
discount the use of tunnels for electric vehicles, with electric vehicle hire from Park & Ride sites.

Questions:

- **Q:** Can you provide notes of your speech?
- **A:** Yes
- **Q:** What’s your view on the relationship between congestion charge and bus priority?
- **A:** What you’re currently doing is sensible but it will not cope with future growth. Concern that there isn’t a drive to solve the city centre congestion issues.
- **Q:** How do we get to more environmentally friendly buses?
- **A:** Example is new fleets and Office for Low Emission Vehicles bid (fly-wheel technology)
- **Q:** What are your thoughts on tidal flow buses?
- **A:** It can work, but biggest issue is where do you put the bus stops?
- **Q:** Any plans to expand rural services? Is there a suppressed demand for buses as there is for bicycles?
- **A:** Busway services have been expanded to villages, but it is not often viable. Often not enough demand for direct services. Council cuts in bus subsidies meant rural services have suffered. Congestion charging could mean better bus services in these areas.
- **Q:** Are Park & Ride sites in the best places?
- **A:** Mostly, yes. Wouldn’t rule out more, like moving Newmarket Rd or Madingley Rd further out. Not sure on the Huntingdon Road option.
- **Q:** What do you think of ‘Boris Bike’ type scheme at P&R sites and collection point at P&R for schools?
- **A:** We are having discussions with some of the private schools.
- **Q:** Any data in terms of Real Time Passenger Information you can share?
- **A:** Cambridgeshire County Council also has the data.
- **Q:** Any ways to make the buses more pleasant?
- **A:** The Busway has leather seats, Wi-Fi, air-con etc. Now also on buses in Ely.
- **Q:** What is your opinion on bus priority lanes? Can they work on their own?
- **A:** I think they can work on own at the moment, but add in extra houses and jobs, you’ll need something else like a congestion charge

**Speaker 3: Professor Stephen Glaister (Imperial College and Transport for London Board Member)**

Professor Glaister spoke in favour of congestion charging. He stated that people often think of the London scheme when the term congestion charging is used. He believes that if a congestion charge is to be considered, a number of issues require attention, including the clarity on the main aims of the scheme, how revenue would
be spent, trip patterns, industry and commerce, communications and governance. He stated that research has shown that it is very hard to win a referendum on a congestion charging scheme before it is imposed, however, a referendum would often be won to keep a scheme once it’s in place. He also stated that there is lots of evidence to suggest charging is popular once it’s in place. Considerable research, planning and consultation took place on the London scheme. He stated that the London scheme is still working, however, road capacity is now being used differently. He suggested that advances in technology could mean new congestion charging schemes could be more cost effective. It was also his belief that schemes elsewhere or an expansion of the London scheme would not work if residents received a discount. Furthermore, strong governance structures are required if a successful scheme is to be introduced.

Questions:

- **Q:** What happened with congestion charging in Manchester?
  - **A:** The Manchester metropolitan authorities submitted a Transport Innovation Fund bid for congestion charge (as in Cambridge). It included a package that included congestion charging and improved public transport. It would have created a revenue stream. A referendum took place (which wasn’t the initial intention) – which No vote won. Lesson was – public need right information, charge element was misunderstood.

- **Q:** I worry that not using the congestion charge words means we’re trying to rebrand something that isn’t popular. Worried that we’re punishing people who can’t afford it.
  - **A:** Find a form of words that says exactly what you’re going to do – don’t get stuck behind London scheme. More like ‘pay as you go’. Do not vary by time of day. In relation to expense – people can’t get around at the moment so there is a time cost already. Use revenue to improve other services (the alternatives). People who will benefit are those who haven’t got cars. The package as a whole is key.

- **Q:** The fact we’d lose a referendum makes choice difficult, we would have to override what the people want. Is there an alternative?
  - **A:** Take the time to work out what you are offering. Research it. You have to make people understand the alternative. There is no real alternative – the revenue this will bring is key. Governance of the area needs to be right to deliver scheme.

- **Q:** Availability of public transport alternatives is the issue here. London had good alternatives to start with.
  - **A:** public transport in outer London is not great. It’s good in centre but further out, cars are still popular. Need to accept cars will be used – just need to accommodate them/persuade them to be used at different times. Stockholm and Copenhagen good examples.

- **Q:** how long would it take to build the evidence and develop a scheme
• **A:** Need to take the right amount of time and research. The London study took two years, including consultation

• **Q:** What is fair? How do we levy bus users and cyclists?

• **A:** Never going to be fair to all. But if you get it right there will be enough compensation for the 'losers'. Cannot ask people to pay more without a return. Cambridge should create its own scheme now and keep the money before a national scheme happens which would result in revenues going to the treasury.

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**Speaker 4: Robin Pellew (Cambridge Past Present and Future (CPPF))**

Mr Pellew stated that a comprehensive package of measures is needed to tackle congestion – including public transport, walking and cycling improvements as well as a sustainable source of income to fund the improvements. The only realistic source is through some form of congestion charging, or possibly a charge on workplace parking. He stated that CPPF favour a congestion charge. It would need to be fair, provide choice and the revenue should be ring-fenced to spread the benefits across the whole of the City Deal area. In addition, he stated that the charge must be non-discriminatory and should be paid by all with exemptions for blue badge holders (for example). It should not be a cordon scheme as such, sensors should be spread across the city. A scheme could include differential charging for more polluting vehicles and alternatives would need to be in place before charge is in place. He stated that while it is hard to compare like for like schemes, evidence from elsewhere shows reductions in traffic volume, improve journey times and improve air quality. He also noted that the revenue generated from congestion charging could be substantial.

**Questions:**

• **Q:** How often would people pay this charge?
  • **A:** people would pay once per day

• **Q:** Not all people come from city and South Cambs. How do you deal with those?
  • **A:** It’s for politicians to decide how wide the benefits should be spread

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**Speaker 5: Tom Byers (Hubl)**

Mr Byers noted that goods vehicles make up 17% of traffic in Cambridge and that the number of Light Goods Vehicles has increased by 63% over the last ten years. He suggested that the current system of uncoordinated deliveries is inefficient. The Hubl proposal combines freight consolidation centres with numerous collection points alongside a dedicated user app which would offer a range of delivery options. This would enable the coordination of deliveries, last mile delivery by cycle courier, and a vast increase in the number of collection points. A similar model operates well in Brussels. Mr Byers estimates that if 5% of deliveries were to use the system it
would take approximately 750 diesel vehicles off the road. This would be replaced with around 100 electric vehicles. If 7.5% of vehicles could be captured, it would take around 1800 of the most polluting vehicles off the road.

Questions:

- **Q:** How many of vehicles that could be taken off the road will be from peak times?
- **A:** It’s hard to know as data isn’t available. But there is very little control on when people can deliver. Hubl allows this control. Providers don’t have much of a choice on when they arrive if they are delivering to a number of towns/cities.

- **Q:** How popular are collection points?
- **A:** Collect Plus, Argos, Asda, are examples all in silos at the moment – Hubl can work with all of the providers. Click and collect has boomed in recent years. Wasn’t available 5 years ago. Waiting for a parcel at home is not often convenient and is not a good use of time.

- **Q:** To what extent should this be a self-sustaining business model?
- **A:** It is perhaps marginally sustainable, but assistance is required to get the model off of the ground in early years. Would also need to restrict freight movements who do not use the facility.

- **Q:** Aren’t we still generating traffic by using a car to go to collection point?
- **A:** If we densify collection points, it allows more sustainable mode choices to them. Study in Germany helps prove this.

- **Q:** Are we changing the role of high street?
- **A:** Local retailers can use this service to get services and stock to edge of city to help compete with larger retailers.

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**Speaker 6: Nottingham City Council – Workplace Parking Levy (WPL)**

A WPL was introduced in Nottingham in April 2012 – the scheme took nearly 12 years from idea through to implementation. The scheme targets peak time commuter traffic by levying an annual charge (currently £375 per annum) on each employer parking space within Nottingham City Council administrative area (it does not apply to businesses with 11 parking spaces or less and discounts are available for NHS and emergency services). WPL was part of a long term plan to tackle peak time congestion without impacting on inward investment. Another key objective of the scheme is to raise revenue for Phase 2 of the tram system, redevelopment of Nottingham railway station and support for the Link bus network (some of these services are not commercially viable). The scheme has a 100% compliance rate and has raised £25 million in revenue in three years. The scheme has low operating costs – 5% of revenue. The WPL has enabled the Council to lever in money from government more easily e.g. revenue from WPL was used for Nottingham’s local contribution towards phase 2 of the tram system. The Council is still awaiting evaluation of the congestion impacts of WPL and associated public transport.
improvements, however, early signs are reported to be positive. The introduction of WPL has incentivised some employers to introduce workplace travel plans.

Questions:

- Q: what is figure from early reduction in traffic?
  - A: it is estimated that the impact of the Levy is to reduce the growth in traffic from 15% to 8%.
- Q: has it had an impact on the number of parking spaces provided by employers?
  - A: Small reduction - about 10% (similar to Perth)
- Q: What is cost per parking place?
  - A: Only pay charge for 11 or more places. About £375 per space per annum. Also discounts locally for NHS, Police etc.
- Q: is this cost just passed on to employees?
  - A: Different workplaces choose how to levy charge on their own employees (some are emissions or salary based.)
- Q: Is this a levy to just provide money to spend?
  - A: The employer is liable. The businesses then put in parking management schemes to get the charge from employees etc. The funding that’s generated offers the public transport alternatives and this is what causes the biggest shift in travel behaviour.
- Q: Is it seen as a tax on growth? How popular is it among employers?
  - A: Some initial concerns regarding this – the Chamber of Commerce did not support the introduction of WPL. But most of this has been mitigated by working with employers to help them understand. Business case set up around the tram and the station – this has been delivered. Need to make difficult decisions to get the changes in mode shift. Businesses and commuters cause the problem, they need to pay towards fixing it.
- Q: Was there any indication of what happened to car parks? Have any closed or been built upon?
  - A: Still early so hard to know. There has been some reduction in spaces. The Universities have developed on some of their car parks.
- Q: Do you have figures on inward commuting?
  - A: It is quite a high number – many people commute from outside of the city.
- Q: Electric link buses – are they replacing existing buses?
  - A: Can get more information sent to panel.

Speaker 7: Peter Wakefield (Rail Futures East Anglia)
Mr Wakefield proposed that rail should play a more prominent role in the City Deal proposals. He suggested that rail enhancements are perceived very positively by the public. He cited Bristol as an example of an area developing rail (Metro West phase 2 is £43million). Mr Wakefield stated that we need to make much better use of rail infrastructure in Cambridgeshire. We need to work with the rail industry to maximise capacity, expand car parking at stations, introduce longer platforms, introduce multi-modal smart-ticketing and continue to build the case for Soham station. He also supports the need for investment in the Cambridge to Newmarket rail corridor and for new stations in the area.

Questions:

- Q: Rail needs a business case. Cost of rail is high. Need more information for business case. What is cost of opening Haverhill – Cambridge line?
- A: The information is not available. Needs study to find out.

Speaker 8: Dr Gabriel Fox (Coton Parish Council)

Dr Fox’s proposal is based on a bus rapid transit system for Cambridge, branded as ‘Cambridge Streetcar’. He stated that the current public transport offering is sub-optimal’ and that full bi-directional bus lanes should be pursued. These should be provided on all major radial routes and would be controlled using advanced signalling. ‘Clean’ tram like vehicles would use the lanes which would be branded as sophisticated and smart, enabling quick boarding and disembarking. Oregon, USA operates a similar system. The system would connect to all Park & Ride sites and is a citywide solution that could be delivered in stages. He stated that the benefits of the scheme are that it is attractive, feasible, flexible, green and clean, cost effective and it would instil civic pride. He went on to say that £100million would buy a lot of bus rapid transit – certainly enough of a system that could unlock further City Deal tranches. His report provides further scheme details.

Questions:

- Q: How do the stops/stations work
- A: You have centre platforms with pedestrian controlled crossings to cross the road
- Q: What about getting buses through centre of Cambridge. Are additional measures (like a congestion charge) required?
- A: No congestion charge needed. This system is attractive enough to get people out of cars. Requires careful route consideration and manage access. Can get people to the edge of the city centre and continue journey on foot. You don’t need dedicated track the whole time
• Q: sceptical that you fit bus route on Madingley with cycle lanes. Also is there not the same issue as the Busway has – the buses get stuck in congestion once you get into the city centre. How close to city centre can you get?
• A: There is room on Madingley and all key radials. Where you do have pinch points, you route general traffic away or use smart signalling. Bus Rapid Transit gets priority
• Q: Are these vehicles particularly narrow?
• A: 3.25m bus lane would work, so there is room for a conventional bus but it is tight. Optical guidance can facilitate narrower buses and therefore less road space.