# U3Ac Environment Committee

Transport Workshop 30th March 2015

U3Ac Offices

Brian Wallis, the Chairman of the U3Ac Environment Committee welcomed workshop attendees. He introduced the Leeds Metropolitan research team led by Professor Graham Roberts. The team would be making a DVD of the workshop.

## Alan Bird, The Environmental Implications of Different Modes of Transport

Alan Bird had worked as an environmental planner and surveyor worldwide. He talked about the environmental implications of different modes of transport. Two crucial concepts are those of sustainability, (specifically the difference between renewable and non-renewable fuel sources) and emissions from differing transport modes. There are a variety of different fuels available with each having differing types of emission. These include gases (for example carbon dioxide, carbon monoxide, nitrogen oxides) and particulates.

The key issues for freight transport were perishability, bulk and weight.

People travel for employment, access to services and leisure. A big issue locally was the location of 'affordable' housing. Citizens had a right to choose where to live (if they could afford it!). Government can attempt to manage transport in several ways using fuel duty, taxes and subsidies. The various transport modes have differing accident risks with associated social implications. Human health is also at risk due to transport-generated air pollution.

a) **Walking** has the benefit of increasing fitness and hence reducing the burden on healthcare services. Walking becomes more problematic when dealing with luggage and bad weather. People have differing maximum walking times dependant on physical fitness. The speaker indicated that he had a maximum walking travel time of about 30 minutes.
b) **Cycling,** like walking, uses food as fuel. There are issues of safety with pedestrians but these are overshadowed by the vulnerability of cyclists to accidents with motorised traffic. Secure parking for bicycles can be an issue. There are tricycles, which are more stable than bicycles, and also electric bikes. In terms of environmental sustainability the key issue is what fuel source is being used to generate power for recharging electric bikes.
c) **Motorbikes** are more fuel efficient than cars but the emissions of two stroke engines are a major concern worldwide.
d) **Cars** are now a very significant component of transport in most societies. In the UK the most significant cost is depreciation, which is normally in excess of the running costs. Generally a car with one person in is twice as expensive as a rail fare, but this has to be weighed against convenience. Emissions and resulting pollution are major issues along with congestion and parking. There are electric cars which have no direct emissions but the poor availability of recharging points restricts

their use along with their high capital cost. In environmental terms the key factor is what was the fuel source and emission used to generate the electricity to recharge them.

e) **Buses:** These have a variety of fuel options and resulting emissions. The emissions of diesel powered buses are a very significant cause of poor air quality in central Cambridge.

f) **Trains:** New track building is expensive and time consuming, especially when new land acquisition is required. Cambridge station is under huge stress due to the number of passengers served being greater than there has ever been.

g) **Aeroplanes:** Air travel produces one of the most significant sources of carbon emissions. Three-quarters of air journeys are classed as recreational. Air fuel was duty free all over the world and this is a major environmental management constraint. Air freight for cut flowers and vegetables from Africa initially used planes that were returning to Europe with spare freight capacity. However the advantages of faster plant growth in tropical areas now makes it economic to specially charter planes but this is a major factor in food miles.

It was emphasised that there is a need to integrate different modes of transport as many journeys use multi modes. It was noted that there is very poor integrated travel planning in the UK when compared to other countries across the developed world.

The attendees were then split into four groups to discuss the talk. They were challenged to consider individual travel modes and patterns.

**Feedback from the presentation on modes of transport**

The first group's rural members encountered difficulties with buses due to the Guided Bus development causing changes in the routes of the previous network of bus services. This has led to key services such as Post Offices being more difficult to access for those without motor vehicles. Group members said that high house prices in and around Cambridge meant that relocation to areas better served by public transport was unaffordable. It was reported that urban dwellers did not encounter these issues. Cyclists caused safety concerns in the city centre. Another group commented that as one got older, one's sense of balance was reduced. It was thought that bikes with stabilisers or tricycles would be more stable. Attendees were aware of the need to reduce one's carbon footprint by car sharing along with eating less meat and dairy. Issues of a more-community-focussed way of life were raised.

Cycling was a significant issue, especially in the UK city with the highest bicycle usage. More cycle training for everyone but especially foreign language students was one answer; better marked lanes and better road courtesy were others. The thorny problem of recognition that one was no longer a competent driver due to age and other medical conditions and then renouncing the car was raised. Should people "shop" others?

**Dearbhla Lawson, Head of Transport, Infrastructure Policy and Funding, Cambridgeshire County Council,** spoke about the role/remit of the council for transport management. (A copy of her PowerPoint presentation is on the U3Ac environment page.) She is in charge of Cambridgeshire's transport strategy. The population of Cambridgeshire is growing and its transport infrastructure needs to be improved to cope with this. The Cambridge City and South Cambridgeshire Transport Strategy has been drawn up and was approved in March 2014. Railway stations are to be improved and a new one has

been agreed at Chesterton Science Park and also the reopening of the one at Soham. Other identified future station locations include Addenbrookes Hospital. The major roads to be upgraded include the A14 (Cambridge to Huntingdon) and to the north the A47 (Norwich to Peterborough). Future upgrades are planned throughout the road network in a phased programme.

In Cambridge, traffic congestion was high and cycling rates were the highest in the UK. The population was increasing. Cycling improvements were being delivered, including improvements to key intersections. These include the Hills Road and Catholic Church intersection. (Note: many of audience found these intersections still difficult/dangerous to use due to the mix of cyclists and motor vehicles). About 4.5 million people visited Cambridge yearly. The roads and railways had capacity problems. We needed to preserve the uniqueness of the city by encouraging bike use, walking and bussing and discouraging car use. Safe cycling routes to school and work were being extended and new routes, including the Chisholm trail along the river Cam, were being developed. The existing patchy and disconnected bike routes are being linked. Cambridge has been awarded the Cambridge City Deal from central government, which totals in the order of £20 million per year for five years from 2015 for transport works. However, these are budgeted amounts which are dependent on the performance of the previous year. The County Council was encouraging the City Council, along with the South and East Cambridgeshire District Councils to work together.

Questions: One of the major city problems was congestion. It delayed buses. A congestion charge was extremely unlikely. (Note: it has been considered and rejected by councillors) Some attendees commented that there was often conflict between pedestrians and cyclists. Cyclists rode on the pavements. Sometimes bus lanes were empty. Could not there be times when bus lanes were no longer statutory, when there were no buses using them eg Sundays on Elizabeth Way?

**Alan Bird** spoke about **Transport in Cambridge.**

**Air.** He commented that relocation of the Cambridge airport had been considered in the past and although Marshalls was willing to move if another suitable site was found, this would take a significant number of manufacturing jobs away from the city. Cambridge airport is also an important standby airport, particularly to Stansted in times of emergency. The situation is also complicated by the fact the airport lies only partly within the City boundary.

**Rail.** Significant parts of the rail network are experiencing higher than ever usage. Consideration was being given to replacing some of the Beeching era cuts, especially the one to Oxford which would require new land acquisition for some of the section from Bedford to Cambridge. Reinstatement of the double tracking from Cambridge to Newmarket would prove expensive, difficult and disruptive but the present single line is a major constraint. The new bike two tier parking racks at the railway station are inadequate and difficult to use.

**Road.** There is evidence that the newly introduced £1 charge per vehicle for the five Park and Ride sites had caused some to drive into the city centre. This is increasing traffic congestion. A significant issue is that the payment system is new and overcomplicated causing significant queues and delays especially due to high numbers of tourists.

The dual use of shared bus and cycle lines was felt by many to be very dangerous and especially for cyclists. The existing dual use of selected pavements for both cyclists and pedestrians (such as along Hills, Madingley and Milton Roads) needs to be more clearly marked and also extended to other selected roads. The very bad condition of roads and pavements has been a significant serious cause of accidents, particularly for cyclists. Repairs have at long last started from October 2014, including the riverside national cycleway. However many are still in dire need of repair. Improvements to the junctions around the inner ring road, partly with the aim of making them safer for pedestrians and cyclists, have in some cases been claimed to make things worse (eg., the Hills Road/ Catholic Church junction). The programme of junction improvement has recently been completed at the Castle Street / Chesterton Lane intersection. A key junction yet to be addressed is Mitcham's Corner where major changes in network routing are being considered, including the problem of Victoria Road which is a residential street being used as part of the inner ring road.

**Cycles.** Cambridge is the cycling capital of the UK (it has the highest ownership and use of bicycles) which from an environmental management standpoint is to be encouraged. However the accident risk to cyclists is relatively high. In some cases cyclists were not aware of the risks that they were creating for themselves. Examples include going through red lights, cycling on a one way street in the wrong direction, cycling blithely onto busy roads without looking; having no lights after dark, texting or phoning whilst cycling and wearing headphones so being unable to hear things around them, and not concentrating on the road and particularly pedestrians. New students (especially those at language schools) needed cycle training. Many had no idea how dangerous cycling could be. There are also significant problems with elderly people cycling whose balance and co-ordination are not what they were.

There is a need to look at training for U3AC members to minimise risk whilst cycling, particularly in the choice of routes. There is also difficulty with visitors to the city who have no experience in being in a cycling environment, particularly with pedestrians not looking out when walking or crossing a cycle route. There are also specific issues with cycle contraflow lanes. There is also a need for more secure cycle parking. Detailed examples were given where improvements can be made to the layout of paths and cycle routes in the city centre.

Ideally it would be best to separate different modes of transport. However the centre of Cambridge City is so constrained that this is not possible to do this. It is considered much safer if bicycles are put with pedestrians rather than with motor vehicles.

**U3Ac Transport Survey 2015. Lesley Miller-Bernal** reported on this. (Report in Appendix.)

**Workshop Group Reports:**

Transport safety: They reported that they found the upgraded intersections more dangerous than they were previously, specifically the junction at Hills Road and the Catholic Church. They questioned the role of the County Council and if they learned by their mistakes or were some principles never questioned? The health costs of air pollution were considered. Roads and pavements are in poor condition with many potholes. Because of safety issues, particularly narrow pavements and busy roads, there was a general reluctance to let children walk to school which then caused yet more congestion.

There was a lack of policing/enforcement particularly for parking in bus lanes. There are specific safety issues for wheelchair users in the city due to the poor state of the pavements.

Public transport: There was not enough information about where and when buses and trains arrived and this was very poorly communicated. Speaking guides as on the Busway vehicles would be welcomed on all buses. More use should be made of local radio stations to give transport service updates. There is still a need for hardcopy timetables[1]. There are insufficient buses in the evenings and at night and particularly on Sundays. The question of funding and licensing of bus services was raised, including the problems of having a monopoly provider. Some participants questioned if it would be better to take bus services back into public ownership. The interconnectivity between buses and also with trains is poor. Currently you are unable to take bicycles on busses and only on specified train services the information about which is poor[2]. It was difficult to ascertain train fares as the present system is so complex. A suggestion was made that train fares should be calculated according to the distance to be travelled. However with the present large number of different train operating companies this may prove very difficult to implement. There was a call to lobby for the imposition of a tax on aviation fuel.

Traffic congestion: The opening statement from the group reported that no easy solutions could be found for many of the identified traffic congestion issues. Cambridge has a tight urban core which is a major constraint to transport operation. There are differing levels of personal mobility, dependant on age and disability that the transport system needs to come to terms with. There are major traffic congestion problems with the inner ring road and the junctions on it. These are in the process of being improved but would they reduce the level of congestion? Consideration should be given to moving some services away from inside the inner ring road, creating edge of city shopping centres. (Note: Like the Newmarket road retail park? This arguably has made congestion even worse). Recent new development have been concentrated in the east of the city whilst the west in the hands of Cambridge University. Does the universities strategic plan for the west of the city consider transport implications?

Air quality: (Note: This group was fortunate to have a specialist in air quality as a member). The poor level of air quality has been recognised as an issue since 2000. The air quality was monitored and action plans had been instigated. (City Council publishes annual reports.) Nitrogen oxides and particulate matter (PM10) levels were occasionally over limits. Buses which were responsible for much of this pollution had been improved but further better buses (Euro 6s) could be utilised. Environmental control zones could be set up; these did not allow entry of the most polluting vehicles. Cambridge tended to retain its air pollution as it was set in a valley.

**Professor Roberts** summed up the workshop. This had been a classically, locally-informed, polite intelligent debate. Contentious issues such as becoming unable to drive due to the affects of aging had been considered.

**Brian Wallis** thanked the speakers, and the participants for their inputs. We hoped to have further workshops in future; possibly carbon footprinting and cycling safety.

[1] These available from Drummer Bus Station Kiosk and at Grafton Centre.
[2] There is an App, and a specific leaflet.