

LSP Global Change Think Tank – Transport Inquiry Report

1.0 BACKGROUND

1.1 In October 2007 the Stroud District Local Strategic Partnership (LSP) established a Global Changes Think Tank to consider the twin impacts of climate change and Peak Oil. The aim is to identify how these twin perils will affect the key assets (Figure 1) that local people rely on and to identify what action will need to be taken by individuals, communities and organisations to increase long term resilience.

FIGURE 1: Initial List of Key Quality of Life Assets

- Social capital – people as individuals and part of community networks and organisations
- Rail network
- Infrastructure associated with public and community transport, cycling and pedestrian access
- Trunk Roads – M5 / A419 / A46
- Housing infrastructure – 48,000 existing properties
- Business infrastructure
- Biodiversity – particularly the Severn Estuary as a major south – north migration corridor
- Local food production capacity - agricultural land and infrastructure (including food processing) as well as domestic and community (e.g. allotments) growing space
- Electricity – distribution network (and a local renewable energy infrastructure as it is developed in the coming years)
- Gas – distribution network
- Water – distribution and treatment network
- Waste infrastructure – associated with collection, treatment and disposal

2.0 INTRODUCTION TO THE TRANSPORT INQUIRY

2.1 The Transport inquiry was conducted in a slightly different way to the first two inquiries. Two previous reports on the role of Land-Use Planning and Housing can be found at <http://community.stroud.gov.uk/general.asp?pid=34&pgid=1532>.

A scoping document was produced based on ‘Travel is Good’ published by the County Surveyors Society (CSS) and the Think Tank focused its considerations around 14 questions that it felt the document posed for the District. Appendix 1 contains the scoping document and the Think Tank’s detailed considerations in relation to it. A short summary has also been produced below.

“ Some of the most compelling literature on transport and travel discusses the evidence that people, everywhere, throughout history and in all economic conditions, spend about an hour to hour and a half a day on travel” Schafer a (2000) regularities in travel demand: an international perspective, journal to transportation and statistics vol 3

3.0 RECOMMENDATION

3.1 The LSP agreed this report and made it available for wider consultation, with the aim of signing off a final report at its June 2009 meeting.

4.0 SUMMARY

4.1 Climate Change and Peak Oil context (Questions 1, 2 & 10)

According to the latest Government figures, CO₂ emissions from the Stroud District totalled 797kt CO₂ in 2006. The biggest emission source is Industry and Commerce with

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42% followed by the Domestic Sector (38%) and Road Transport (20%). Road transport fell 3kt CO₂ (1.8%) between 2005 and 2006.

The road transport emissions equate to 1.46tes CO₂ per capita, which is significantly lower than the average figure for the rest of 'rural Gloucestershire', which is 2.69tes CO₂.

The relatively low emissions from road transport are surprising given that the last census showed that Stroud District had the highest level of car ownership in Gloucestershire.

The latest research suggests that Peak Oil may be reached globally by 2011. From that point on the supply and demand curves will diverge forcing prices up.

4.2 What can be done in practice to encourage the shift to smaller engines within the District? (Question 3)

Little as this will be driven nationally by taxation policy and market forces (i.e. fuel scarcity). Large organisations in particular may be able to drive change through their fleet management and employee terms and condition policies and practices.

4.3 What can be done in practice to change driver behaviour within the District? (Question 4)

With an average of 1.25 cars per household in 2001 (more since), there is little scope for a fundamental short term change and it may be more realistic to think in terms of replacing short car journeys with low carbon alternatives (e.g. walking and cycling), where health/fitness issues also come into play as well. If this strategy is to be pursued then it will be essential to tackle some of the current barriers to walking / cycling through a variety of projects. Future Local Transport Plans produced by Gloucestershire County Council will be crucial in encouraging and supporting behaviour change as will Health plans designed to promote physical activity.

Some projects the Think Tank thought the LSP might want to promote for inclusion in Local Transport Plan 3:

- Developing schemes aimed at driver behaviour that are based on road safety rather than ecological benefit (e.g. Parish speed monitoring, School Safety Zones, 20 mph zones)
- Promoting the development of the Community Car Clubs
- Encouraging employers to develop 'Green' Travel Plans, including participating in the tax-efficient 'Cycle to Work' bike purchase scheme
- Encouraging schools to develop 'Green' Travel Plans and supporting these with the creation of safe routes to school and increasing opportunities for on-road training for secondary school pupils
- Travel Smart initiatives that are based on community advocates working with people to develop Individual Travel Plans
- Designating 'strategically important' utility (as well as leisure) cycling routes. This might include infrastructure changes to poor junctions and roundabouts that hinder cyclists (e.g. redesigning provision for cyclists on the road between Sainsbury's and Cainscross roundabouts and making sure the canal towpath becomes a utility cycling route). The availability of such a Strategy / map would provide a local focus for Local Transport Plan investment, including securing developer contributions

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- Supporting communities pursuing Shared Space projects (e.g. Stonehouse)
- Reducing speed limits to 20mph in residential areas (i.e. areas where there is housing close to the road)
- Promoting and supporting utility walking
- Investing in the local Sustainable Transport Network including good road maintenance, more designated cycle ways and secure cycle parking

It will also be essential to maintain, either physically or electronically, as many services (including jobs) as possible at the local level to help people minimise their need for a car. This sort of approach is likely to be more successful in encouraging modal shift rather than simply increasing the availability of public transport or aiming to slow the growth of multiple car households. The District Council's Core Strategy will be central to achieving this.

4.4 What is realistic in terms of encouraging the shift to Public Transport in the District, particularly given its rurality? (Question 5)

At present in the Stroud District, most public transport is subsidised and some completely reliant upon public funding. Current financial pressures make retention of existing off-peak and rural services problematic and hardly encouraging towards a shift to public transport. Rural-demand responsive bus pilots locally have proved very expensive and have gradually been phased out. In the short term it is worth considering whether better/ more innovative ways of marketing public transport could be developed, based around a target audience. One of the lessons learnt from work on Individual Travel Plans is the lack of awareness by non-users of what public transport opportunities are already available.

4.5 Could biofuels be produced within the District for use by local people without negatively impacting food production? (Question 6)

Given the agricultural nature of the District there are opportunities to grow biofuels (e.g. oil seed rape) directly or generate bio-gas through technologies such as anaerobic digestion (which can use cattle slurry). There are a number of local public authorities and private companies with large transport fleets that might be able to benefit from locally provided biofuels and bio-gas. The challenge will be, through exemplar projects, to connect potential providers and users and reduce the business risks of failure (given these are relatively untried technologies) to both.

4.6 Could we close the loop in the District over time by becoming 'self sufficient' in renewable electricity generation in order to make electric vehicles 'carbon neutral'? (Question 7)

As reported in previous Think Tank reports there is a necessity to produce an energy 'map' for the District that attempts to demonstrate energy demand (electrical, heat and fuel) across business, domestic and transport sectors and assess how much can reasonably be 'generated' locally. The District Council is working with Severn Wye Energy Agency to examine ways of doing this in order to inform the development of its Core Strategy.

4.7 Is Hydrogen part of the solution in the District and can anything be done now to prepare the way locally or do we need to wait for decisions to be made at a national level? (Question 8).

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Hydrogen is probably part of the solution, although this is currently too complex an issue for local attention and very much something that will need to be driven at a national level.

4.8 What can be done to help insulate the local economy from the impacts of Peak Oil by increasing local production and consumption? How are operators of large fleets (private and public sector) preparing for Peak Oil? (Question 9)

Realistically, it will be very difficult to insulate local concerns from the power of international markets. In the short-term it will be necessary to ensure that civil contingency plans enable critical parts of the local fleet to continue operating if there are fuel shortages.

Given that commercial vehicles typically have working lives of 10-years there is the opportunity to take a longer term view of what will be required. There may be opportunities for public agencies through their own fleets or longer-term and transport intensive contracts (e.g. bus provision, refuse collection, housing maintenance) to start to specify shifts over time to low or no carbon fuel sources (see also the response to Question 6 which provides a possible option).

4.9 What are Gloucestershire County Council, Network Rail, Highways Agencies and the District Council doing to protect transport infrastructure? Is this adequate? (Question 11)

It is unlikely that any of these organisations would claim that protection is adequate. As we move out of recovery from the immediate impacts of the 2007 floods there is a need to take a much more long-term and strategic view of infrastructure planning at district and County levels.

4.10 Have lessons been learnt from the summer floods and other extreme weather events e.g. 2003 heat wave? (Question 12)

This is a difficult issue for the Think Tank to judge at this point in time and the question is probably better addressed to the Local Resilience Forum. There is a need for the County and Local Civil Contingency plans to be climate change proofed on a regular basis. The new National Indicator 188, targets for which form part of the Gloucestershire Local Area Agreement, provides a basis for assuring this.

4.11 Is there any evidence that the transport infrastructure authorities and providers are adapting what they do to climate change? (Question 13)

There is some evidence of progress (e.g. changes to winter maintenance regimes) and the need to take a long-term and strategic view of infrastructure provision (e.g. location, design standards) has already been stressed above.

4.12 Is Public Realm an appropriate issue to consider within this inquiry or is it a separate subject in its own right? If it is appropriate to deal with in May what are the key questions? (Question 14)

Transport is only one part of the public realm agenda, which the Think Tank felt was an inquiry topic in its own right.

5.0 Final Observations

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5.1 Given the relative distribution of emission sources it was felt by the Think Tank that efforts to reduce CO₂ emissions might be better focused on the domestic sector (where much is already happening) and industry and commerce. In terms of the latter, activity by the main business support agencies is sporadic and limited and potentially an area of focus for the LSP. Investment in both sectors has the potential to provide significant short-term cost and carbon reductions. However, shifting people's reliance on the car will require a longer-term view to be taken. That said short-term and locally focused projects and initiatives that support modal shifts could be promoted by the LSP through the Local Transport Plan.

5.2 Given the various emission sources and increasing fuel costs, where should the LSP be focusing its efforts over the next 5-years? (Question 15)

The Think Tank noted that a recurrent theme in its responses was to think in terms of exemplar projects, often funded by the public purse. There is a need to recognise that a proportion of exemplar projects fail and we need to be cautious about spreading effort and resources too thinly across too many exemplar projects. This would be particularly true, where these may be marginal in terms of reducing CO₂ emissions or supporting adaptive behaviour.

5.3 Given all the issues raised in this paper what exemplar project(s) should the LSP be sponsoring? (Question 16)

6.0 Conclusions

6.1 The broad areas of priority for the LSP to focus on through its Sustainable Community Strategy could be summarised as:

- ❑ Encourage all LSP partners to conduct detailed energy and cost audits of their transport activities
- ❑ Ensure an emergency transport fuel supply plan is in place
- ❑ Take a long-term view of encouraging a shift from private (the car) to public transport, cycling and walking
- ❑ Seek to influence the expansion of existing / future transport programmes such as the Local Transport Plan
- ❑ Reduce overall transport demand by using both planning powers, particularly the new Core Strategy and Strategic Infrastructure Investment Plan, and lobbying 'muscle', to maintain local service provision and the viability of towns and villages
- ❑ Promote the use of locally produced, non-fossil transport fuels such as biogas and renewable electricity in both council operations and public transport
- ❑ Launch a major public energy / transport fuel-awareness campaign
- ❑ Find ways to encourage local food production and processing; facilitate reduction of energy used in the transportation of food in particular
- ❑ Work with partners to improve the public satisfaction and perception of local bus services