localism in transport planning?

Robin Hickman, Tim Pharoah, Jason Torrance and Richard Dyer examine the funding of 'smarter travel choices' through recent Local Transport Plan submissions

Nick Turner/Sustrans

Left

Workers walking and cycling, Castle Park, Bristol, on National Cycle Route 4

Now this was a bold claim: 'I want us to be the greenest government ever' (Prime Minister David Cameron, speaking to civil servants at the Department of Energy and Climate Change in May 2010[1]). But our delving into the funding and implementation programmes within the current round of Local Transport Plan submissions – LTP3 – finds little evidence of the funding levels required to help the transport sector contribute to this goal.

Drawing on work carried out for Sustrans and Friends of the Earth,[2] this article considers the funding given to 'smarter travel choices' (STCs) through the LTP3 submissions made at the end of April 2011. STCs cover investment in a range of interventions at the personal level to bring about a change in travel behaviour, away from the car and towards other modes. These measures include Travel Plans (for workplaces, educational and health organisations, residential areas and rail station facilities), personalised travel planning, car pooling and sharing, marketing and media campaigns, public transport information, tele-working, and e-retailing. Recent research suggests that investment in these types of activities is 'low cost, high value' in cost-benefit terms,[3,4] and fits well alongside other modal shift investment such as new public transport, walking and cycling facilities, new vehicle technologies, and urban planning.

The expectation, given the available evidence, and the conjecture on sustainability and the apparent

shift to local decision-making, is that funding levels in STCs would be very healthy. Even in times of financial restraint, this is an area within transport planning that supports green economy objectives – as a driver of growth, where the greening of economies is seen not as a 'drag on growth' but as a new 'engine of growth'.[5] This would also be consistent with an understanding of the wider role of transport in society (the impact of delays, accidents, physical inactivity, etc.[6]). However, the evidence is that local transport funding, in particular Integrated Transport Block funding, through which STCs are financed, has experienced very large cuts. But before considering reductions in funding, this article first examines the current levels of transport carbon dioxide (CO_2) emissions per capita in a number of local authority areas, as emissions drive the imperative to invest in sustainable transport initiatives.

Transport CO_2 baselines

A number of authorities are categorised in Table 1 according to per capita CO_2 emissions in their areas. There are large variations in annual emissions, ranging from over 7 tonnes of CO_2 per capita to below 1 tonne of CO_2 per capita. The percentage of emissions from the transport sector is also highly variable, ranging from over 40% to less than 15%. The national average (England) for transport is 2.1 tonnes of CO_2 per capita (26% of total emissions).

It can be seen that affluent rural areas (for example Richmondshire, Runnymede, St Albans) are associated with high per-capita transport emissions and a high proportion of emissions in transport relative to other sectors. Larger urban areas and lower-income areas (for example Liverpool, Manchester, Harlow, London), historic university cities (for example York, Oxford, Cambridge) and more remote urban areas (for example Hastings, Lincoln) tend to be associated with lower per-capita transport CO_2 emissions. Some of the lower-income northern towns have surprisingly high per-capita emissions because of their relatively high levels of car use (for example Warrington and Doncaster). The recent low-density developments on the edge of these towns, including out-of-town retail sheds, leisure complexes and residential areas inaccessible to public transport, may have added substantially to the car dependency in these areas.

There are a wide range of factors underpinning travel behaviour – and thus the variation in CO_2 emissions – covering socio-economic and attitudinal factors, urban planning, and network investments governing the levels of public, transport, walking and cycling and highway infrastructure.

If the national CO_2 reduction target is applied to the levels of emissions highlighted in Table 1 (an 80% reduction in CO_2 emissions by 2050, as set out in Climate Change Act 2008), and the transport sector contributes a 'fair share' of this target, then ~0.5 tonnes of CO_2 per capita becomes the target within transport. If this is to be achieved on an equitable basis spatially, then some areas have a very long way to go, requiring a reduction in transport emissions of up to 90%. All areas need to contribute at least a 40% reduction in emissions.

Similarly, if a shorter timescale is considered, and a 50% reduction in transport emissions by 2030 is targeted, then ~1 tonne of CO_2 per capita becomes the target within transport.

'If the transport sector contributes a 'fair share' of the national CO_2 reduction target, then ~0.5 tonnes of CO_2 per capita becomes the 2050 target within transport... some areas have a very long way to go'

The majority of areas need immediately to start making major reductions in transport emissions. Budget allocations for the intervening years (perhaps on a five-year basis) would also help in moving towards the end-state targets, as this encourages early progress to be made in terms of investing in sustainable transport options.[8,9] An argument often made is that transport should play only a minor contribution in terms of reducing CO_2 emissions since reducing emissions in transport is likely to be relatively expensive. The difficulty here is the high level of emissions in the transport sector. Using the data for England (2008), even a 90% reduction in the industrial and commercial and domestic sectors means that transport has to achieve a 52% reduction if the 80% total reduction target is to be achieved.

The basis, therefore, for investment in STC measures is that there are high transport CO_2 emissions baselines and high aspirations to achieve high CO_2 reduction targets across the country, yet in many areas we are not investing in STC measures – or indeed in non-car infrastructure and wider sustainable transport measures – to any great extent. Local authorities cannot provide the complete solution (there are areas such as fuel taxation and vehicle emissions standards which are beyond their remit), but they have a major role to play. There are also wider difficulties in that areas with high CO_2 footprints (for example some of the rural areas) may also be those with fewer opportunities for reducing them. As yet, there is little analysis that considers the potential for reducing transport CO_2 emissions within different contexts.

Table 1
Transport CO_2 emissions in selected authority areas

Authority	Total emissions, tonnes of CO_2	Road transport, tonnes of CO_2	Population, thousands – mid-year estimate)	Total per-capita emissions, tonnes of CO_2	Road transport per-capita emissions, tonnes of CO_2*	Road transport as a percentage of total emissions	Percentage reduction to meet the 2050 ~0.5 tonnes of CO_2 per-capita target	Percentage reduction to meet the 2030 ~1 tonne of CO_2 per-capita target
High transport carbon dioxide emitters (>3 tonnes of CO_2 per capita)								
South Buckinghamshire	923.9	505.4	65.7	14.1	7.7	55%	-93%	-87%
Richmondshire	537.4	267.9	51.4	10.5	5.2	50%	-90%	-81%
Stafford	1,316.3	617.6	125.2	10.5	4.9	47%	-90%	-80%
Stratford-on-Avon	1,234.7	555.7	118.7	10.4	4.7	45%	-89%	-79%
Runnymede	795.8	374.0	82.2	9.7	4.5	47%	-89%	-78%
Malvern Hills	716.8	327.5	74.8	9.6	4.4	46%	-89%	-77%
Brentwood	632.9	286.7	72.5	8.7	4.0	45%	-87%	-75%
Harrogate	1,533.2	586.8	156.1	9.8	3.8	38%	-87%	-73%
Mid Devon	787.7	278.5	75.6	10.4	3.7	35%	-86%	-73%
Basingstoke and Deane	1,532.9	589.6	161.5	9.5	3.7	38%	-86%	-73%
St Albans	1,079.6	490.8	135.2	8.0	3.6	45%	-86%	-72%
Warrington	1,934.2	705.9	196.2	9.9	3.6	36%	-86%	-72%
Doncaster	2,546.5	897.0	289.3	8.8	3.1	35%	-84%	-68%
Windsor and Maidenhead	1,242.8	437.6	141.7	8.8	3.1	35%	-84%	-68%
High-medium transport carbon dioxide emitters (2-3 tonnes of CO_2 per capita)								
Milton Keynes	1,920.0	593.9	232.9	8.2	2.6	31%	-80%	-61%
Swindon	1,744.7	449.9	196.0	8.9	2.3	26%	-78%	-56%
Nottinghamshire	5,698.6	1,763.3	773.3	7.4	2.3	31%	-78%	-56%
Barnsley	1,725.7	496.0	225.2	7.7	2.2	29%	-77%	-55%
Leeds	5,464.9	1,646.8	779.3	7.0	2.1	30%	-76%	-53%
Lewes	580.8	202.2	95.7	6.1	2.1	35%	-76%	-53%
Durham	3,853.7	1,037.5	505.0	7.6	2.1	27%	-76%	-51%

Authority	Total emissions, tonnes of CO_2	Road transport, tonnes of CO_2	Population, thousands – mid-year estimate)	Total per-capita emissions, tonnes of CO_2	Road transport per-capita emissions, tonnes of CO_2*	Road transport as a percentage of total emissions	Percentage reduction to meet the 2050 ~0.5 tonnes of CO_2 per-capita target	Percentage reduction to meet the 2030 ~1 tonne of CO_2 per-capita target
Medium-low transport carbon dioxide emitters (1-2 tonnes of CO_2 per capita)								
Stockton-on-Tees	3,183.8	382.4	189.8	16.8	2.0	12%	-75%	-50%
Newcastle upon Tyne	1,889.9	474.2	277.8	6.8	1.7	25%	-71%	-41%
York	1,181.8	296.4	194.9	6.1	1.5	25%	-67%	-34%
Birmingham	6,534.5	1,492.9	1,019.2	6.4	1.5	23%	-66%	-32%
Manchester	3,215.3	686.7	473.2	6.8	1.5	21%	-66%	-31%
Liverpool	2,815.0	601.8	441.1	6.4	1.4	21%	-63%	-27%
Harlow	644.7	106.3	79.9	8.1	1.3	16%	-62%	-25%
Sheffield	3,665.9	681.9	539.8	6.8	1.3	19%	-60%	-21%
Bristol	2,319.6	535.7	426.1	5.4	1.3	23%	-60%	-20%
Nottingham	1,806.1	369.7	296.6	6.1	1.2	20%	-60%	-20%
Greater London	46,357.1	8,735.6	7,668.3	6.0	1.1	19%	-56%	-12%
Ipswich	670.1	123.9	125.4	5.3	1.0	18%	-49%	–
Exeter	691.2	114.2	118.5	5.8	1.0	17%	-48%	–
Southend-on-Sea	917.5	156.6	163.1	5.6	1.0	17%	-48%	–
Low transport carbon dioxide emitters (<1 tonne of CO_2 per capita)								
Oxford	1,014.0	138.9	146.5	6.9	0.9	14%	-47%	–
Norwich	793.9	127.8	137.3	5.8	0.9	16%	-46%	–
Cambridge	782.1	109.0	118.7	6.6	0.9	14%	-46%	–
Hastings	413.9	79.2	86.3	4.8	0.9	19%	-45%	–
Lincoln	527.6	65.4	88.0	6.0	0.7	12%	-33%	–
National (England)	**413,963.3**	**108,526.8**	**51,464.6**	**8.0**	**2.1**	**26%**	**76%**	**-53**

*Ranked in descending order by 2008 transport per-capita emissions (tonnes of CO_2)

Data from the Department of Energy and Climate Change, 2010[7]

Table 2
Summary LTP3 analysis (example authorities)

Authority		Funding				
STT per capita: 5.65		**2011/12 – Year 1,** £ thousands	**Average LTP3 allocation – 2011/12-2014/15,** £ thousands	**Average LTP3 allocation per capita,** £	**Average change compared with LTP2,** %	**Average LTP2 allocation – 2008/09-2010/11,** £ thousands
Warrington Borough Council	Total LTP3	4,750	4,820	24.6	-13%	5,557
	Maintenance Block	3,360	3,205	16.3	+2%	3,137
	Integrated Transport Block	1,390	1,615	8.2	-33%	2,420
Population: 196,200	STC funding, if known	30	–	0.2	–	–
	STC % of total LTP3	0.6%	–	–	–	–
	STC % relative to STT	2.7%	–	–	-	–
Stockton on Tees Borough Council	Total LTP3	3,187	3,366	17.7	-5%	3,537
	Maintenance Block	2,019	2,013	10.6	+36%	1,479
	Integrated Transport Block	1,168	1,353	7.1	-34%	2,058
Population: 189,800	STC funding, if known	170	164	0.9	–	–
	STC % of total LTP3	5.3%	–	–	–	–
	STC % relative to STT	15.9%	–	–	–	–
Bucks County Council	Total LTP3	17,306	12,892	26.2	-2%	13,184
	Maintenance Block	14,700	9,949	20.2	+31%	7,577
	Integrated Transport Block	2,606	2,943	6.0	-48%	5,607
Population: 491,500	STC funding, if known	300	300	0.6	–	–
	STC % of total LTP3	1.7%	–	–	–	–
	STC % relative to STT	11.0%	–	–	–	–
		Average LTP	**17,977**	**22.6**	**-28%**	**25,048**
		Average MB	**9,738**	**14.3**	**+1%**	**9,624**
		Average ITB	**7,756**	**8.6**	**-44%**	**13,817**

Only three authorities' data is shown above – the full report[2] gives data for 27 authorities; averages are based on this fuller selection

STC Smarter travel choices STT Sustainable Travel Towns – Incomplete data available

Only 'personal intervention measures' are included as STC measures. STT funding based on £5.65 per capita per annum, derived from *The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Summary Report*[4]

LTP3 funding levels for smarter travel

The presentation of STC measures and wider content in the LTP3 documents is extremely varied. The lack of any consistent reporting of financial data in particular makes comparison between LTP3s extremely difficult. The reduction in funding for LTP3 relative to LTP2 is, however, very evident (see Table 2).

Comparing LTP3 average allocation levels (2011/12-2014/15 where available) with LTP2 average allocation levels (2008/09-2010/11), using our selection of LTPs, it can be seen that total LTP funding has been reduced by an average of 28%. The Maintenance Block has remained at a similar level, with a 1% increase, but the Integrated Transport Block has been reduced by 44%.

In addition to major reductions in funding in the Integrated Block, STC measures have not, in general, been given higher priority within the shrinking funding pool. The levels of STC funding are extremely low, with an average in the selected authorities equating to less than £1.50 per capita. Funding of STCs in the Sustainable Travel Towns (Darlington, Peterborough and Worcester) – which can be viewed as an indication of good practice – equated to around £5.65 per capita. Relative to this benchmark the latest LTPs are providing around 20% of the funding levels required. And this is assuming that the Sustainable Travel Towns are doing enough to reduce transport CO_2 emissions relative to national targets – which unfortunately they aren't.

There are wider funding sources for STC measures, and the Government's Local Sustainable Transport Fund (LSTF) may partially fill the gap, but the promised £560 million over four years is insufficient and is as yet only a temporary pot. If distributed equally (the LSTF is a competitive funding round), this would amount to an additional £2.08 per capita per year. Not surprisingly, our survey of LTP team contacts suggests that there are major concerns over funding levels for STC measures (of those surveyed, 37.5% believe that funding is inadequate, and 62.5% believe it is very inadequate). The prospects for exploiting the high-value opportunities presented by STC interventions therefore appear bleak.

'Total LTP funding has been reduced by an average of 28%... and the Integrated Transport Block has been reduced by 44%'

'Hands-off' localism?

The LTP process has generally been well regarded by practitioners, providing a framework for local transport strategy development and implementation, with an outlook over the long term and the potential to give consistency in funding to help encourage progress against strategic (national and local) goals.

However, with the current third round of plans, the story has become very different. The Integrated Block and STC measures are severely under-funded through LTP3. Very few LTP3s develop a coherent area-wide transport strategy embracing all forms of transport expenditure (including major schemes, maintenance, integrated transport, and wider funding opportunities). There is virtually no forward look beyond the current spending programme, and LTPs present only a partial picture of policy and spending priorities.

Despite strong recommendations from the Committee on Climate Change, delivering sustainable transport seems to be a low priority for the Government (largely reflecting funding opportunities), with spending at a very limited level relative to that in the Sustainable Travel Towns. Research, monitoring and evaluation are usually absent from the process, and hence we have little idea as to the effectiveness of spending. Transport emissions vary considerably across local areas – but are invariably too high – and local authorities are falling short on delivering their share of the CO_2 reductions needed from transport.

We make the following recommendations:

- Government at all levels should ensure that funding levels for STCs at least match those in the Sustainable Travel Towns – at around £5.65 per head.
- Local authorities should produce climate change strategies for their local areas to ensure that the Government's targets for cutting CO_2 emissions (including from transport) are met and that the commitment to sustainable transport is realised.
- Central government should provide incentives for local authorities to improve local transport by evaluating outcomes delivered from past Local Transport Plans. This will guide future cost-effective funding and maximise accountability to local communities.
- The LTP process should be re-strengthened, with common outputs and reporting, and with local strategies demonstrating how progress will contribute to national targets.

The greenest government ever? Unfortunately, the latest round of Local Transport Plans gives little cause for optimism, with local authorities lacking the means to deliver sustainable transport choices on the scale required. If we wish to reduce CO_2 emissions in transport, we need to do better than this.

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Notes

1 See www.number10.gov.uk/news/speeches-and-transcripts/2010/05/pms-speech-at-decc-50113

2 R. Hickman and T. Pharoah: *Moving Towards Smarter Travel. LTP3 and Smarter Travel Choice Assessment Study*. Sustrans and Friends of the Earth, Jul. 2011

3 P. Goodwin: *Improving Value for Money in the Context of Transport Expenditure Cuts: Feasibility Study*. University of the West of England, 2010. Available at https://eprints.uwe.ac.uk/13130/2/Goodwin_Transport_Committee_Transport_and_the_Economy_submission.pdf

4 L. Sloman, S. Cairns, C. Newson, J. Anable, A. Pridmore and P. Goodwin: *The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Summary Report*. Department for Transport, 2010. www2.dft.gov.uk/pgr/sustainable/smarterchoices/smarterchoiceprogrammes/

5 *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. UN Environment Programme, 2011. www.unep.org/greeneconomy/GreenEconomyReport/tabid/29846/Default.aspx

6 *The Wider Costs of Transport in English Urban Areas in 2009*. Cabinet Office Strategy Unit, 2009

7 *Local and Regional CO_2 Emissions Estimates for 2005-2008 for the UK*. AEA for the Department of Energy and Climate Change, Sept. 2010. www.decc.gov.uk/assets/decc/statistics/climate_change/localauthorityco2/458-local-regional-co2-2005-2008-main-rpt.pdf

8 *The Fourth Carbon Budget. Reducing Emissions through the 2020s*. Climate Change Committee. Dec. 2010. www.theccc.org.uk/reports/fourth-carbon-budget

9 *Briefing. Local Carbon Budgets*. Friends of the Earth, Dec. 2010. www.foe.co.uk/resource/briefings/local_carbon_budgets.pdf