

The Cartmel Peninsula - a delicate balance



A submission to the resumed planning enquiry in response to additional research carried out by SLDC and subsequent modifications to LADP

From Andy Mortimer, ATC, BA Hons, FRSA

**South Lakeland District Council's Land Allocation Development Plan:
A submission to the resumed planning enquiry in response to additional research
carried out by SLDC and subsequent modifications to LADP.**

This evidence is in addition to that already submitted by Andy Mortimer to the Inspector in Responses 10227, 11210, 11211, 11212, 11213 of June 2012

This response centres on inaccuracies in research, spurious statistics and SLDC's failure to take cognisance of evidence previously submitted, in preparing its "Infrastructure Delivery Plan", April 2013

The new **Infrastructure Delivery Plan**, relied in part on research commissioned from the company AECOM and stated:

"A study Cartmel Peninsula Traffic Impact Assessment Study (March 2013) has been undertaken during the period of postponement of the Land Allocations Examination in Public. It found that traffic levels generated by the development proposed in Grange and the wider Cartmel peninsula would not have significant detrimental impacts on the local road network and therefore did not result in any need for mitigation or other measures to be put in place." (para 3.30)

This is a false conclusion because:

- 1) The current and future traffic scenarios used in the AECOM study, whilst acknowledging a so-called "seasonal adjustment factor", are predicated on statistically invalid, baseline, traffic-flow data.**
- 2) The AECOM study does not address, even in "*broad terms*", the second part of the remit set by SLDC to identify "*transport measures to mitigate any impacts of the proposed allocations*" on, for example, Grange-over-Sands Town Centre.**
(Further Highways Evidence Supplier Questionnaire, Appendix A para 2.2)
- 3) Extrapolating from current car ownership and traffic flow in the Cartmel Peninsula, there will be a minimum 30% increase in traffic, to service 737 houses, on already congested roads classified by the Highways Authority as "rural 'B' roads". This is not "moderate" development as SLDC has claimed, is not sustainable and will have significant detrimental impact.**
- 4) 422 of those houses and several employment units will be on 6 new housing estates accessed from the B5277, over a distance of less than one mile between site MN25M in Kents Bank and site R110 in Grange-over-Sands. There are no infrastructure plans proposed to mitigate the road safety risks inherent in such high density, urban, ribbon development on this narrow stretch of minor rural road.**

My previous responses to the Inspector have already identified the LADP's failure to acknowledge the **Core Strategy's view** that,
"given the problem of town centre congestion in Grange at peak times, significantly higher traffic could well threaten the core economic activity of the town, namely tourism" (CS 5.32)

and the fact that,

"The main B5277 road runs through the heart of Grange over Sands ... In places this road narrows and on some stretches, there is a feeling of car domination."

(SLDC Framework Land Allocations Development Plan Document Consultation on emerging site options – Grange over Sands).

I believe that the Cartmel Peninsula Traffic Impact Assessment Study, carried out by AECOM, fails to justify the LADP's contradiction of the Core Strategy or explain SLDC's rejection of evidence from previous consultations. The study is so badly flawed as to be meaningless.

The failure to address significant infrastructure issues at this stage will have serious, long-term implications for SLDC and Cumbria County Council in ensuring sustainable social and economic viability for Grange-over-Sands and the whole Cartmel Peninsula in the future.

1. Issues around the methodology of the AECOM Transport Assessment

1.1 The sites chosen for base-line data collection do not represent the most congested parts of the Cartmel Peninsula road network.

Establishing traffic flow projections at 6 selected junctions, as AECOM did, does not show what impact a further 30% increase in vehicle numbers would have, in the future, on **congestion in Grange Main Street, Kents Bank Road, Risedale Hill, Holywell Narrows in Allithwaite and Flookburgh**. Nor does it focus attention on the effect of worsening and serious congestion in terms of emergency vehicle response times, additional tourist traffic, trade delivery, parking, pedestrian, disabled and cyclist safety at these sites and on the road network as a whole.

1.2 AECOM's choice of day – Tuesday 29th January 2013* - does not provide a robust enough base-line assessment for measuring even typical traffic flow in the Cartmel Peninsula, let alone provide the basis for, as it claims, a "worse case scenario". (AECOM Study para 1.2)

For example, had AECOM considered evidence drawn from Cumbria County Council's Automatic Traffic Counts on the B5277– the main road through the Peninsula – it clearly shows that **traffic is lighter on a Tuesday than most other working days**. (see my Appendix 1)

There appears to have been no scaling-up factor applied to the AECOM data to make the Tuesday base-line more 'typical', or 'worse case'.

* The AECOM report appears to mis-date its Traffic Flow Survey Data. The 29th January 2012 [sic] was a Sunday, not a Tuesday. This error occurs 30 times in Appendix D.

1.3 The times chosen by AECOM for their survey are illogical

The traffic flow in Grange-over-Sands is not typical or at its highest between the urban commuter times of 08.00 – 09.00 in the morning and 17.00 – 18.00 in the afternoon. The times chosen do not provide an adequate assessment model for objective future projections.

The most basic analysis of previous CCC Traffic Counts shows that the busiest times ('worse case') on the Peninsula's roads are between 11.00 - 12.00 in the morning and between 15.00 - 16.00 in the afternoon. (see my Appendix 2).

Even AECOM's own figures, collected as part of their "*Further Highway Evidence to Support Submission SLDC Land Allocations DPD*", carried out on another Tuesday only 2 weeks after 29th January 2013, show clearly that the busiest period for traffic on the B5277 was between 13.00 – 15.00. (Appendix B' Automatic Classified Counts, Allithwaite' p167)

[Whilst this data, like that of the CCC traffic counts, was collected to support evidence of traffic speeds on this stretch of road it also shows *de facto* the volume of actual traffic. Therefore, AECOM's survey on Tuesday 12 February 2013 shows that the combined volume of northbound and southbound traffic was nearly 50% greater between 14.00 - 15.00 than between 08.00 – 09.00 that day (*ibid*)]

No factor appears to have been applied to the AECOM baseline statistics to account for greater traffic flow at busier times of day on the Cartmel Peninsula.

1.4 I therefore question:

- **how the base-line data criteria were established?**
- **why was earlier CCC traffic flow data not considered in setting the parameters of those criteria?**
- **what specific data was used to compare traffic on the B5277 with an analysis of flow on the A590? (AECOM Study, Table 1.2)**

I do not believe that the AECOM survey is reliable enough to provide, as it claims, a valid worse case "capacity analysis" (AECOM Study, Section 1.1 Introduction).

I believe that SLDC have blindly accepted the findings of this survey in order to make the claims they do in the Infrastructure Delivery Plan.

The choice of time, the day and even the seasonal adjustment factors, do not actually present meaningful statistics. Evidence suggests that the more typical and much heavier traffic flow outside the parameters chosen by AECOM would have provided a truer capacity analysis.

1.5 The trip distribution assessment in the AECOM survey was based on 2001 census data which is now out-of-date and unreliable, given developments over the past 12 years.

Significant changes in travel movements have been brought about by factors such as increased car ownership in the Peninsula, closure of local petrol stations, growth in deliveries of on-line shopping, growth in tourist facilities like holiday lodges, caravans etc. The new holiday centre Merlewood alone, with 55 self catering apartments, is off the B 5271 one mile from Grange town centre and now brings hundreds more visitors to the Peninsula every week.

I believe that the projections in AECOM's study are, therefore, anachronistic, especially in relation to figure 1.2, and table 1.4.

In addition, the statement in the study that, *"the proposed site allocations will create employment and residential sites within the Cartmel Peninsula. Therefore it could be argued that a proportion of residential trips will constitute travel within the Cartmel Peninsula to employment locations, as opposed to travelling further afield to Lancaster and Barrow etc,"* (p.7), is very speculative, not supported by evidence, and would appear to have been overtaken by SLDC's decision to modify some LADPD proposals for previously designated employment sites in Cark and on land south of Allithwaite Road in Kents Bank. (Modifications MM020 and MM053).

1.6 The development flows of the AECOM survey are also unreliable, owing to the weaknesses in the baseline 2013 traffic counts (see 1.1, 1.2, 1.3 above) and I believe that the TEMPRO growth model shown is at odds with the Department of Transport's own national statistical projections of a 25% increase in volume of all traffic, and an increase in car ownership of 30%.(Table TRA 9905) by 2025.

Comparison of CCC Highways statistics (100225ATC and 120217ATC) indicates a significant increase of traffic, during similar weeks in February in 2010 and February 2012, at the same location on the B5277 in Allithwaite. (Average Annual Daily Traffic increase of 500 vehicles between 2010 and 2012)

This suggests that there has already been growth of 23% in traffic on the Cartmel Peninsula over 2 years even before any increase resulting from building over 730 additional houses is factored in.

[AECOM's own survey on the B5277 in February 2013, referred to in 1.3 above, also shows a further 18% increase in traffic, on the same stretch of road, since February 2012 (Automatic Classified Counts, Allithwaite, Appendix B Further Highway Evidence Report p167)]

1.7 The modelling undertakings, by AECOM, identifying the turning movements at each of the selected junctions are flawed because they use a self-confessed "*urban environment*" model.

The B5271, B5277 and B5278 are classified as B 'rural' roads by the Highways Authority (AADF data – minor roads 2008). Their capacity, therefore, cannot be assessed by inappropriate "urban" criteria. Different modelling is required to accommodate road use by caravans, commercial vehicles, coaches, cyclists, tourist and holiday traffic.

2. Further issues around sustainability and improved transport measures required to mitigate the impacts of proposed allocations

2.1 The National Planning Policy Framework (2012) (NPPF) clearly states that planning policies should *“recognise town centres as the heart of their communities and pursue policies to support their viability and vitality”* (section 2 para 23).

The AECOM study did not collect or use any data about traffic flow and management in Grange town centre, despite it having been previously identified as “congested” in SLDC documents.

To imply, as the new **Infrastructure Delivery Plan** does, that building 737 houses, all accessing the B5277 west of the town centre, will not impact on Main Street Grange is clearly a nonsense and in contradiction of the NPPF.

Measures for better traffic flow management will be essential if the viability and vitality of the town are not to suffer.

2.2 I believe that the Infrastructure Delivery Plan does not consider sustainability issues either.

In order to achieve sustainable development the NPPF states that, *“Planning policies should support economic growth in rural areas to [inter alia] ... support sustainable rural tourism”* (section 3 para 28)

The AECOM assessment does not look at the need for improved traffic flows in shopping areas, increased coach set-down/pick-up points in the town centre, extended off-road parking, improved pedestrian crossing points, cycle-way facilities and designated disabled parking and pavement access.

2.3 NPPF also obliges councils to **“create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians”** (section 4, para 35).

This has clearly not been considered by the LADP in its modified proposals, with no plans to widen existing narrow pavements on the B5277, no plans to create new cycle routes that are safe and feasible and only lip-service paid to the improvement and use of sustainable transport.

2.4 One of the biggest omissions of the AECOM Traffic Assessment has been its failure to address the future parking requirements of an increase in population of at least 30%.

SLDC has failed to show how the LADP would *“accommodate the efficient delivery of goods and supplies”* (NPPF section 4 para 35) or how it would *“seek to improve the quality of parking in town centres so that it is convenient, safe and secure”* (NPPF section 4 para 40)

3. Conclusions

Logic, not flawed statistics, would suggest that a significant rise in the number of vehicles, in addition to that already predicted over the next 12 years, will lead to traffic domination on the rural road network of the Cartmel Peninsula and make it unsafe, unsustainable and unattractive.

The density and style of housing development proposed will dominate and the current views of Morecambe Bay, which tourists come to see, will be lost. Part of the area's unique quality will be destroyed.

The infrastructure of Grange-over-Sands and the Cartmel Peninsula is a delicate balance. The Core Strategy and earlier reports recognised this.

Why does the Infrastructure Delivery Plan now seek to deny it?



South of Allithwaite Road (MN25M)



Berry Bank (R89)



Cardrona Road (R627M)



Guide's Lot (R350M)



Low Fell Gate (R74 & R449)



Trickett's Field (R110)

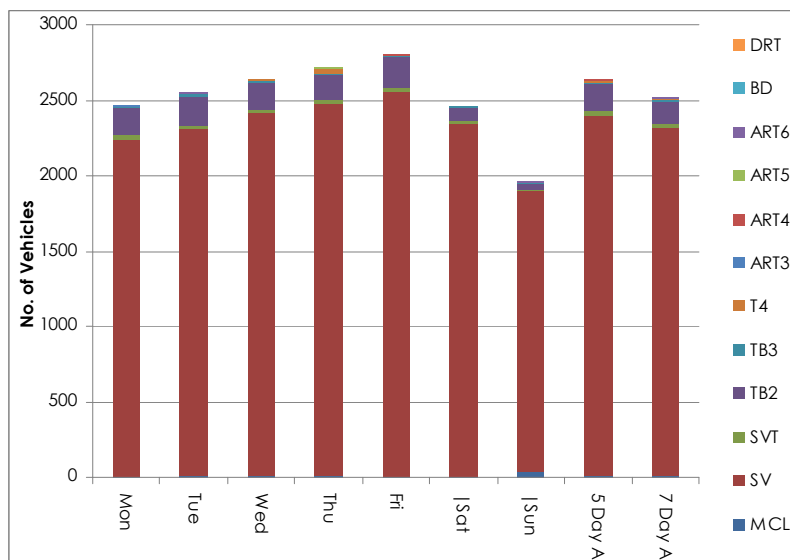
6 sites on a one mile stretch of B5277 for 422 houses and employment units

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05/05/13

Appendix 1

Data has been drawn from 091209ATC for B5271, December 2009; 100225ATC for B5277, February 2010; 120217ATC for B5277 February 2012, supplied by Victoria Upton MCIHT MSc BSc Traffic Management Engineer, Cumbria Highways and Environment, Cumbria County Council, County Offices, Kendal, Cumbria, LA9 4RQ

CCC's Table 120217ATC clearly shows that traffic is heavier on a Wednesday, Thursday and Friday than on a Tuesday.



Average number of vehicles on B5277 17 Feb - 23Feb 2012
Source CCC table 12021ATC 'Two-Way Results'

CCC's Table 091209ATC and table 100225ATC also imply that Tuesdays are one of the quietest days on these roads and traffic volume that day is likely to be below the average for the working week

Appendix 2

Analysing the CCC Automatic Traffic Counts on the B5277 at Holywell Cross Roads, Allithwaite (OSGR 338159/476154) would suggest that peak traffic flow only occurred here between 08.00 – 09.00 hrs 3 times a week in 2012 and only once at this time in 2010. Similarly, these tables reveal that 17.00-18.00 was only recorded as the busiest once a week in February 2012. Table 091209ATC also confirms that peak traffic flow on the B5271 in the afternoon was never between 17.00 – 18.00 hrs.

CCC's Table 120217ATC would suggest that average daily traffic flow on the B5277 in February 2012 was highest in volume in the morning between 11.00–12.00 and in the afternoon between 15.00–16.00 not between 08.00-09.00 and 17.00-18.00.

Time	Total vehicles
0000	9
0100	5
0200	3
0300	1
0400	2
0500	10
0600	30
0700	101
0800	165
0900	164
1000	185
1100	200
1200	208
1300	205
1400	203
1500	221
1600	206
1700	198
1800	130
1900	104
2000	71
2100	49
2200	34
2300	16

Average traffic volume by the hour on B5277 17 Feb - 23Feb 2012, am and pm peaks
Source CCC table 12021ATC 'Two-Way Results'