



Briefing 13/14 April 2013

'ALARM Survey 2013'

To: contacts in England and Wales,
For information: contacts in Scotland and Northern Ireland

Key issues

In England and Wales, authorities estimate that £10.5 billion would be needed to bring their roads back into reasonable condition

Average time to clear the backlog of highways repairs is 11 years

Big impacts on the highways network of flooding and water damages

1. Introduction

The Asphalt Industry Alliance has issued the 18th Annual Local Authority Road Maintenance (ALARM) Survey for 2013. The survey was carried out in January and February 2013 and investigates levels of maintenance activity and funding and the impact on planned maintenance. It covers councils in England and Wales and 75% of councils completed returns in time for inclusion in the survey report. Its aim is to take a snapshot of the general condition of the local road network based on information provided directly by those responsible for its maintenance, thus providing a means of tracking any improvement or deterioration. At the same time, survey questions related to funding, the type of maintenance carried out, and the issues affecting maintenance service levels, are asked to provide context to the results.

The survey can be found [here](#)

2. Main themes

2.1 Funding

The report notes a number of financial points

- the average local authority budget for highway maintenance in England (excluding London) shows a 10% rise on last year, following an 11% fall the previous year
- budgets in London during the year of the Olympics increased by 30% and in Wales by 22%.
- across England and Wales, the total overall road maintenance budgets allocated increased by 15% compared with the previous year, to around £2.9 billion
- central government funding from 2010/11 to 2014/15 has been reduced year-on-year, meaning a cumulative reduction in annual funding of £442 million, without adjusting for inflation
- of the total highway maintenance budget, around 50% was spent on structural maintenance, i.e. the carriageway itself, indicating a total expenditure across England and Wales in 2011/12 of around £1.45 bn. This is an increase of about £240 million compared with the previous year
- in Wales, the proportion of the budget spent on structural maintenance has increased significantly over the past two years, from 32% in 2011, to 40% in 2012 and in 2011/12 to 52%. This appears to be largely due to a one-time borrowing facility available from the Welsh Government

- the 15% increase in overall road budgets is supported by the increase in the proportion spent on carriageway repairs. A larger share of a larger pot has resulted in the average local authority carriageway repair budget increasing by just over £1.2 million.

The report states that the level of reactive maintenance required through the year is a good indicator of the overall state of the roads as it includes work such as repairing potholes and any remedial work required on utility trench reinstatement beyond the two-year guarantee period. This year's survey reveals a higher proportion of budget was spent on reactive maintenance in Wales. It also identifies variations in what each authority describes as being the ideal proportion of the budget that should be factored in for reactive repairs, although overall it is about 15%.

The report notes that most local authority highway maintenance programmes are managed against budget figures set annually. It has long been recognised that this hinders efficient planning of maintenance work, in particular, planned preventative maintenance which is at least 20 times less expensive than reactive work, such as patching and mending potholes. Nearly all authorities, 98% stated in this year's survey that they believed longer term funding would help efficiency and provide a more durable road network. When asked what they believed to be the optimum term that funding should be set for, to aid forward planning, the majority (53%) said five years. A significant percentage, 32% said that it should be for 10 years or longer.

2.2 Flooding

The report discusses the fact that during 2012, England experienced what weather experts described as "extreme rainfall", with serious flooding affecting many areas which wreaked havoc, not least to the road network. It goes on to say that water is the most severe threat to road condition in this country, as it undermines the lower, structural layers of the road which, if not swiftly rectified, can lead to major damage that is costly and time-consuming to repair. Of the respondents to this survey, 59% said that some part of the fabric of their road network had been badly affected by 2012's extreme rainfall. In England (excluding London), the cost of the damage caused was estimated at an average of £3.9 million per authority, or £297 million across those authorities responding to this question.

In Wales, 71% of authorities reported that their roads had been affected, to the tune of an average cost of £2.1 million per authority or a total of £33 million across those authorities who responded. For the third of London authorities affected, the cost of the resulting damage amounted to an average of £0.7 million, equating to a total of £8 million across the capital for those authorities affected.

In addition to those costs, nearly a third of all authorities reported that they had had to cope with other unforeseen additional costs, primarily caused by weather extremes including drought as well as snow or freezing conditions. Some London authorities also cited consequences of the city's hosting of the Olympics as presenting unforeseen costs. These average just over £1.2 million for each authority reporting such costs, amounting to an additional £65 million of costs not covered by the annual budget. In its 2012 Autumn Statement, the Government promised extra funding for road maintenance, £215 million of which has been allocated to the road network. This falls 57% short of covering even the additional costs of damage caused to the network by last year's flooding. It will be made available in two tranches, in 2013/14 and 2014/15.

2.3 Budget Shortfall

Consistent with reports from previous years, the shortfall in annual maintenance budgets remains significant. The shortfall is described as the difference between the annual budget that highways departments calculate they require to keep their road networks in reasonable order and the actual budget they receive. Among authorities in England, outside London, the average shortfall per authority has increased over last year, although in Wales the situation has improved dramatically, due to a number of authorities benefitting from the Welsh Government facilitating longer term borrowing.

Highways departments were asked to estimate how much it would cost to bring their road networks up to scratch (assuming that they had the resources in place to make it practical to do so as a one-off project). From there, longer term and cost effective, planned preventative maintenance programmes could be put into place, reducing the future cost of more extensive repairs. Despite additional government funding of £200 million in 2011 to help cope with road damage caused by severe weather, there has been no significant fall in the overall amount authorities consider they would require to achieve this. In London the amount has increased significantly. The overall average per authority is now £60 million (up from £56 million last year), amounting to over £10.5 billion across England and Wales.

2.4 Backlogs

Authorities reported that the estimated amount of time required to clear maintenance backlogs in England (excluding London) would be 12 years, an increase over the 11 years reported last year. In London, the estimated “catch-up” time is 11 years, compared to nine years in 2012, and in Wales there has been a reduction from 17 to 14 years. 5% of authorities reported that they do not have a maintenance backlog.

2.5 Structural Road Condition

The survey highlights that one in five local authority roads across England is reported to be in poor condition, defined as the road having less than five years’ remaining life. This is slightly lower in Wales, where on average, 17 %of roads are in poor condition. Across England and Wales, 44% of roads are reported to be in good condition, i.e. they have 15 years or more residual life, while 36% are in adequate condition, with between five and 15 years of residual life.

2.6 Potholes

The report states that the majority, over 60%, responding to the survey use the guideline depth of 40mm for the definition of a pothole on their network. The effect of a pothole can vary dramatically dependent on its location and the nature of the traffic on the road. Some authorities use shallower or deeper measurements to define a pothole, with a greater number in London reporting that they define potholes shallower than 40mm than in Wales, where more authorities use a depth of 50mm or more as their definition.

Following a decline in the number of potholes reported in 2012, the average number of potholes filled by authorities in England and Wales represents a 31% increase compared with the number reported last year. Rural local authorities are the worst affected, and increasingly so. The average cost of filling a pothole has risen slightly to £58 to fill one hole with the total amount spent in filling potholes across England and Wales having risen, from £90 million last year to £114 million.

2.7 Road Surfacing Frequency

The report notes that the ideal frequency of road resurfacing is between 10 and 20 years, accounting for the lifespan of specific materials, the road type, and the level and nature of its traffic. Replacing the surface layer regularly maintains an appropriate level of grip, vital for road safety, and maintains a weatherproof seal on guard against water ingress and winter freeze/thaw effects. Only roads in London came close that which is considered the ideal frequency of road resurfacing, between 10 and 20 years, while the wait for rural roads to be resurfaced has increased significantly. The average, across all classes of roads, is 54 years.

2.8 Utility Openings

Except in Wales, the average number of utility openings has increased somewhat year on year: by 14% overall, following a 7% decrease last year. The projected total number of utility openings across England and Wales during the past year is estimated at nearly 2.4 million. On average 80% of utility openings are completed in accordance with legislation, although 20% are not completed to specification. It is estimated

that 15% of the carriageway maintenance budget is spent on premature maintenance due to reinstatement of utility openings.

2.9 Compensation Claims

The number of claims received for compensation for damage to person or vehicle due to poor road condition has increased substantially in the past year, from an average of 251 claims per authority reported in 2012 to 363. However, the average number in Wales has decreased from 170 claims a year to 80, notes the report.

The lowest amounts paid out were in England (outside London), where the average claim is about £440, compared with £1,500 in London and £1,000 in Wales. Authorities outside London and Wales still receive a much higher number of claims: an average of 452, compared with 300 for the last year reported. Taking the amounts paid out and the estimated costs of processing claims, across England and Wales, road user compensation claims have cost an estimated total of £45.2 million.

3. Regional Focus

Government Region						
	E Midlands	W Midlands	East	South West	South East	England
Miles of LA road	19,336	20,146	24,464	30,803	29,181	
No. of licensed cars	2.2m	2.8m	2.9m	2.8m	4.6m	
Est. time to clear backlog	11 yrs	8 yrs	7 yrs	14 yrs	21 yrs	12 yrs
One-off "catch-up" cost to clear backlog, avge per LA	£98m	£41.5m	£56.8m	£63m	£66.5m	£69m
Frequency of resurfacing, all road classes	65 yrs	52 yrs	73 yrs	40 yrs	55 yrs	54 yrs
No. of potholes filled over last year, avge per LA	8,774	14,802	8,913	24,289	12,948	16,041

	North West	North East	York/Humb	London	England	Wales
Miles of LA road	22,554	10,007	19,621	9,159		20,933
No. of licensed cars	3m	1m	2.2m	2.5m		1.4m
Est. time to clear backlog	12 yrs	11 yrs	11 yrs	11 yrs	12 yrs	14 yrs
One-off "catch-up" cost to clear backlog, avge per LA	£79m	£39.5m	£95.5m	£50.5m	£69m	£21.5m
Frequency of resurfacing, all road classes	60 yrs	39 yrs	42 yrs	34 yrs	54 yrs	107 yrs
No. of potholes filled over last year, avge per LA	22,347	9,068	18,324	3,102	16,041	7,082

Above is a regional split of some of the survey figures and reflect the variety of different factors influencing different regions. Even taking into account the differences in the scale of the network, there are a wide range of responses across the regions for all the above topics. This information is not in the original survey.

4. APSE comment

This report highlighting the state of highway network will come as no surprise to those involved in delivering highways services. The importance of the network to the state of the national economy is obvious and as such justifies adequate investment. The likelihood of adequate resources being made available to bring the network up to scratch is nil but local authorities are using new approaches, investing in new technology, working closely with neighbouring councils and prioritising work differently. The move towards asset management and better planning by some highways authorities, rather than reacting to worst first, is helping to change attitudes across the sector. Having the resources to maintain the roads is only one aspect of the problem of course. Such are the numbers of vehicles on most roads that any road closure causes significant problems. Minimising closures is something local authorities are addressing and there is evidence that those using, for example lane rental schemes, are managing to reduce the time roads are out of action. More local authorities need to look at this kind of example to reduce network disruption.

This report notes that utility openings reduce the structural life of a road with most highways engineers believing that the effect of deep trenching reduces road life by at least 30% and this is borne out by research. The message is that the fewer times that roads are dug up, the better – getting this right will depend on close working relationships between utility firms and local authorities.

The Highways Maintenance Efficiency Programme (HMEP) has produced a number of toolkits addressing issues such as pothole repairs and shared services which aim to highlight good practice and these acknowledge that there is a lot of expertise within the sector that can be shared widely and APSE would encourage all local authorities to engage with this programme.

The borrowing facility made available to all local authorities by the Welsh Government has certainly had an impact on the ability of those authorities to address the condition of the highway. Although many would argue that this is not enough to meet the needs of the entire network, it does show that extra powers can produce effective results if they are provided.

Flooding remains a well publicised issue although the publicity normally concentrates on the impacts on homes and traffic issues rather than on the impacts on the road network. However, water will cause damage to the underlying levels of local roads and this is an expensive and time consuming problem to rectify. The same is true of damage from snow and ice, another factor which this survey highlights. Putting arrangements in place to tackle flooding remains a national and local priority.

The survey notes that the number of claims for compensation for damage to person or vehicle as a result of poor road condition has increased substantially over the past year at an estimated cost of over £45m. This is not an issue to be ignored and many local authorities have taken a more robust approach to managing and rebutting these claims over recent years. Local authorities must be prepared to stand their ground on such claims where appropriate, ensuring they have clear policies and procedures in place to help them manage such claims effectively.

The highways network is the most valuable asset that most local authorities own. Ensuring it is properly managed is vital to the wellbeing of the locality. Pointing to historic problems, unique local conditions or a lack of historic investment will not help improve the state of the asset. Proper plans, an investment strategy based on asset management data and good communication with users, are important starting points to keeping the highway network up to scratch.

Clearly extra funds are needed but collaboration, new technology, asset management approaches and better communication all have a role to play when addressing the condition of our roads – the solution is not only about cash.

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