



Distribution of residual life.

possible maintenance requirement: the report indicates that 5% of motorways fall into this category; 9% of trunk roads and 15% of principal roads.

● A £1500M shortfall between what local authorities' highway departments need to maintain their roads properly and what they actually receive was revealed this spring in a survey conducted by the Refined Bitumen Association. The RBA's fourth Annual Local Authority Road Maintenance survey sought the views of all Britain's local authorities which, between them, are responsible for 95% of UK roads. The survey found that the shortfall had increased by 25% over the past year. Under current budgets, local authorities can afford to resurface roads only once every 106 years.

this summer. Holders of HAUC certificates will be able to transfer them for a reduced fee during the first 12 months of the new HAPAS scheme.

"There will not be any major changes made to the existing system," adds Oddy.

"It will be taken over and managed in its present form but under surveillance so any problems can be identified and ironed out by the BBAs' Highways Technical Advisory Committee."



Paul Oddy

NRMCS: Stats beyond reproach

Are Britain's roads improving or deteriorating? The answer to this question can be found in the results of the annual National Road Maintenance Condition Survey which have just been published for 1998 (see article left). NRMCS is a marvellous statistical tool which, since 1977, has been measuring indices of highway condition and tracking the variation year by year.

NRMCS started off as a partnership between the then Department of Transport and the local authorities. It is co-ordinated by a joint Executive Committee and relies on information gathered by local highway authorities, joined now by the Highways Agency's "Super Agents".

A few years ago many local authority practitioners in highway maintenance felt that the NRMCS data was not reflecting their experience on the ground and worse, the Treasury seemed to be relying on NRMCS indices to justify further reductions in investment in structural maintenance.

The CSS (formerly the County Surveyors Society) was bold enough to challenge this stability and commissioned studies to look at the condition of the highway network and to see whether the NRMCS statistics were correct. There was other evidence to suggest that conditions were worsening and that maintenance was under-funded, particularly the survey undertaken by the Institution of Civil Engineers.

The CSS studies looked at the spend on highway maintenance, conditions on the highway network and the interpretation of the statistical information.

The first study by Coopers & Lybrand identified a declining trend in expenditure on local authority roads. The second, produced by WDM, which looked at a sub-set of the national NRMCS data, suggested that behind the national statistics was a deteriorating trend which had been masked by the way the statistics had been gathered.

Two more studies commissioned from the TRL examined the data in more detail and suggested that changes to the "tails" of the condition distribution might provide a more sensitive indicator of changes in the overall condition of the road network.

It was clear from the studies that the NRMCS statistics themselves were beyond reproach, but they might not be telling the whole story and by concentrating on the aver-



John Ekins

ages of indices might not properly reflect deterioration at the margins. Further work was undertaken which suggested that the change in condition of the "tails" worst decile was in fact significant.

Further work on the gap between actual conditions revealed by NRMCS and ideal conditions described in the Local Authority Association's Code of Good Practice indicated that there was indeed a significant backlog of work. On the basis of this analysis a national backlog of £5.25bn was identified compared with the £4.9bn in the ICE survey.

The studies undertaken by the CSS undoubtedly confirmed that the NRMCS was statistically valid but may not be the best measure of early signs of worsening condition. The 1997/98 NRMCS results have now caught up with the hidden trend and are showing significant deterioration.

The indices for all classes of road declined and in 1998 were the worst recorded by the survey since it started.

Clearly this begins to bring the NRMCS results in line with the perception of practitioners and road users throughout the country and shows the dangers of anticipating trends and making premature budget decisions. Hopefully a lesson has been learned and funding levels will be restored to maintain the value of the precious asset of the national highway network.

John Ekins, County Surveyor of Hampshire, is Chairman of the NRMCS Executive Group.