

## Newsletter 16 February 2010

### *New Year – new ideas?*

Having mentioned in our December 2009 Newsletter (15) that we may not issue a newsletter every month, this proved to be the case with no January 2010 edition. However, we're back this month with 7 pages of news and information.

One reader suggested that we should consider including brief technical items and "hints and tips" in the Newsletter, as a way of sharing knowledge about PCIS. So, in this February issue, the first of 2010, we have a brief article on the topical subject of **finding and measuring frost damage in pavements**.

### *PCIS website takes over from UKPMS*

We carried out a thorough review and update of the PCIS website (<http://www.pcis.org.uk>) at the end of last year (2009) and decided that it was ready to take over from the UKPMS website (<http://www.ukpms.com>) which had become increasingly outdated and hard to maintain.

The UKPMS website has been "frozen" and there will be no more changes or updates to it, but it has been left available as an archive. There is an automatic "re-direct" on the front page of the UKPMS website – if you want to get into the site you have to move onto another page within about 15 seconds. Otherwise you will find yourself at **pcis.org.uk**.

There is also a link back to the UKPMS website from the PCIS website which opens a new tab and takes you past the front page of the UKPMS website.

### *As of December 2009, all changes in UKPMS will be on the PCIS website only, so please remember to consult the PCIS website first.*

The website is there for **you**. It is important that it reflects your needs and provides you with the information you require. If there are any comments or suggestions you would like to make about the website, its contents or its design then use the "**contact**" screen on the PCIS website to report them to the PCIS webmaster (Layla Baldachin). We don't guarantee to implement every suggestion, but we will see what we can do to help you get the most from the website.

## UKPMS Annual Health Check

The 2009 UKPMS Annual Health Check is almost complete. Four of the five developers – Exor; Symology; WDM and Yotta have completed the Annual Health check successfully (full details on the PCIS website [here](#)).

There are three main areas of change for UKPMS in 2009:

- incorporating the requirements for calculating financial information for assets, (GRC and DRC)
- incorporating the requirements for the Footway Network Survey, and
- adding edge treatment rules for SCANNER data

Several local authorities have asked about the requirements for data and processing to produce National Indicators in England. None of the four national governments (England, Wales, Scotland or Northern Ireland) has requested any changes in the requirements for gathering and processing survey data for reporting carriageway condition (and hence performance). Therefore the requirements for reporting in 2010 will be unchanged from 2009.

## Review of UKPMS core functionality

Matthew Lugg and Chris Capps met Mostaque Ahmed, the DfT's head of the Local Major Projects and Maintenance Division, and Edward Bunting on 21<sup>st</sup> January 2010 to present the final report of the Review of UKPMS Core Functionality project and secure the DfT's agreement to fund the proposed redevelopment of UKPMS.

Mathew Lugg pointed out that UKPMS is a vital tool to deliver the Government's and local authorities' Transport Asset Management and Asset Valuation Agenda. UKPMS is now out of date; it does not meet local authorities' requirements and it needs some radical restructuring and redevelopment to make it fit to deliver authorities business needs. The outline business case showed that improvements to UKPMS had the potential to deliver the substantial improvements in local authority efficiency that would be needed whichever party formed the next Government. Without those improvements there was a question whether the benefits from the asset management approach would actually be delivered. Previous work on behalf of the DfT (the Ebert review) had established that some DfT funding would be needed to underpin the renewal programme – without some DfT "pump-priming" the commercial sector would not be able to invest in developing the software.

The DfT accepted the recommendations of the report and had been persuaded of the need to do something urgently. However there were issues about funding and timing. In principle, and subject to funding being available, the earliest the Department would be able to progress the recommendations would be in the three years 2011/12; 2012/13 and 2013/14.

In the interim, the DfT asked that specifications for the projects identified in the review should be prepared ready for an early start, if funding became available, and the PCMG should identify opportunities to "pump prime" the implementation of the recommendations from within existing contracts.

## ***Pavement Condition Management Group***

The PCMG is due to meet in London on 23<sup>rd</sup> February 2010. Topics for discussion include the progress of the PCIS support contract; the proposed new Asset Management Implementation technical support contract; the way forward for SCANNER accreditation and QA, and implementing the review of UKPMS core functionality; and delivering the PCMG business plan over the next couple of years.

## ***UK Roads Board***

The UK Roads Board is due to meet next on 26<sup>th</sup> February 2010.

The Roads Board website ([here](#)) has been revised and updated – for example with the new business plan, and the minutes of previous meetings, including those from 30<sup>th</sup> October 2009.

## ***Roads Board Advisory Group***

The RBAG is due to meet in Birmingham on 5th March 2010. Topics for discussion include: funding highway maintenance in a tight economic climate (Matthew Lugg); updating “Well Maintained Highways” (Lila Tachtsi); research on deterioration modelling (Tony Parry – Nottingham University); and preparing for the Traffic Speed Deflectometer on local roads (Les Hawker); as well as a round up on the activities of the UK Roads Board’s technical groups (Chris Capps).

## ***PCIS Regional Seminars***

We are starting to think about the next round of PCIS regional seminars and we would welcome your suggestions and comments.

As the implementation of the recommendations of the review of UKPMS core functionality is likely to be delayed for some time, we wondered whether the second round of seminars should be this autumn, and should focus on the change introduced in UKPMS this year (calculating financial information for assets; the Footway Network Survey and ways of getting more from SCANNER data).

***What do you think?***

***What would you like us to cover?***

Please send your thoughts and comment to us at [ukpms@trl.co.uk](mailto:ukpms@trl.co.uk).



## **Next meetings of the CIPFA HAMP Network**

The CIPFA Highways Asset Management Planning Network (HAMP) provides a forum for local authorities to share experience and good practice in all aspects of highway asset management.

The network runs a series of events three times a year, focusing on a variety of issues, based on the latest developments in the field. In the forthcoming series of events, titled "**A Climate for Change**", recent developments on climate change and its impact on the way highway assets are managed will be covered.

Participants will have the opportunity to share their experiences on the impact of cold weather, severe rain or high temperatures and drought on the performance of the highway network. Good practice from highway authorities will be presented and links with the asset management process will be highlighted.

Five events are scheduled:

**22nd February in London**

**23rd February in Weston-super-Mare**

**24th February in Wigan**

**25th February in Durham**

**26th February in Nottingham.**

For full event programme and bookings please go to the CIPFA website [here](#) or contact Denise Edwards at CIPFA on 01244 394600 or at [hamp@cipfa.org.uk](mailto:hamp@cipfa.org.uk)

## **Improving the use of SCANNER data in Scotland**

Transport Scotland has let a six month contract to TRL to investigate ways of developing the SCANNER data collected by the Scottish Road Maintenance Condition Survey (SRMCS) into information for works identification.

The current SRMCS collects information in addition to that required for the SCANNER RCI. This information includes items such as edge deterioration and surface texture variability that might be used to establish an extended RCI in the future. However, the information could be used now to help route managers to identify and establish the work that is required on the carriageway. The purpose of this research project is to develop a process that links the information to a series of intervention levels at which remedial works are required.

It will involve a further study and development of the investigative work carried out on behalf of the UK Roads Board and the DfT by the SCANNER RCI Working Group and TRL to develop the current revised RCI performance indicator.

The project inception meeting was held in Glasgow on 29<sup>th</sup> January 2010 with a workshop to discuss what information local authority route managers need do about

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(Including support for UKPMS, Visual Surveys & SCANNER)



their networks in order to be able to maintain them efficiently. Discussing basic questions such as:

- What do you do with the information and how would you use it?
- What are you not currently getting from SCANNER and the RCI ?
- What does this leave you unable to do?
- What do you expect from SCANNER and RCI?

For further information about this project please contact TRL's project manager, Michael McHale in Scotland, [mmchale@trl.co.uk](mailto:mmchale@trl.co.uk).

## Complementary Guidance for the UKRLG Codes of Practice

Dissemination of up to date good practice is one of the key roles of the UK Roads Liaison Group (UKRLG), which has published three Codes of Practice:

- [Well-lit Highways, on street lighting management](#) (2004)
- [Well-maintained Highways, on highway maintenance management](#) (2005)
- [Management of Highway Structures, on bridge maintenance management](#) (2005)

A third Code is under preparation and due to be published in summer 2010 to provide guidance on the management of traffic management systems.

Since the three Codes were published there have been a number of changes in government policy on the management of highway assets, including the introduction of new statutory duties on highway authorities.

The UKRLG is currently preparing complementary guidance to advise and direct users of the codes to where they may find more up to date information to assist them in implementing good practice and the recommendations of the Codes. The complementary guidance will have the same status as the Codes.

Following the publication of the report on *Lessons from the Severe Weather February 2009*, the winter content in *Well-maintained Highways* has been revised. The revised Section 13 and Appendix H, together with all other complementary guidance, are available from the UKRLG website [here](#).

The Department for Transport has also published information for councilors and senior local authority officers about preparing for winter conditions on highway networks. The leaflet can be downloaded [here](#)



## Measuring the effect of frost on carriageways

Everyone has noticed the sudden deterioration in road condition due to the extended cold period, the snow and the penetrating frost this winter. Several people have wondered whether it would be possible to use SCANNER survey data, or CVI and DVI visual inspection data, to benchmark road condition before the damage was inflicted by the recent severe weather. Superficially, this is a very attractive idea, but there are a number of reasons why it is not a completely practical approach.

By and large, well maintained roads in good condition suffer relatively little damage. But, where the surface is ageing, or has been damaged by excavation and reinstatement, water can penetrate into small cracks and other defects in the surface. When the water freezes (often overnight) it expands, opening up the cracks. During daytime thaws the ice melts and more water seeps in, before the next freeze. Repeated freeze thaw cycles gradually open cracks and create cavities and the surface deteriorates very quickly. Traffic soon displaces the loose aggregate and potholes form. Most of the damage caused to carriageways by severe weather is very obvious, is very localised (patchy), and occurs where there were already minor defects in the surface.

In a visual survey the deterioration in the lengths and areas affected would be reported as an increase in either the severity of defect or the extent of defects. Many well sealed lengths of the carriageway in good condition will remain mostly unaffected, so the measure of the impact of the severe weather would be as a change in the severity and extent of defects over a comparatively small proportion of the network, and therefore not easy to detect by comparing the overall results of condition surveys before and after the severe weather, even though the localised damage would be very obvious to any observer.

A SCANNER survey measures a range of different parameters. There might be an increase in the extent of cracking, in some places. But crack measurement is the least consistent and repeatable measure, so the extent of any actual change might be masked by the variation in reporting between surveys. Frost damage is unlikely to increase rut depth, except very locally (in each pot hole). As SCANNER measures rut depths 100 times in each 10m subsection, and then reports an average value, the potholes would need to be quite extensive to be seen in a subsequent SCANNER survey, when they might appear as a very local increase in rut depth. Surface damage would only show up in ride quality if the vehicle wheels actually passed through the damaged area. Most drivers try to avoid driving through deep potholes for obvious reasons – and again these would mostly be very local effects. Changes in texture might show up, but in most cases the areas where the texture had changed would be only a small proportion of the whole.

With both visual surveys and machine surveys, the survey data have to be very accurately located on the network to be absolutely sure that a localised defect extending over a few metres is accurately positioned to within a metre or so, to be able to compare the “before” with the “after” survey. Therefore it is always quicker and easier to find areas of weather damaged surface through routine safety inspections and customer feedback reporting, and measure the impact of the severe weather through the increase in the amount of reactive maintenance required.

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Ideally a local highway authority would record the location of each and every safety defect, the treatment required, and the associated costs on the network in its pavement asset management system. This information will quickly show where the reactive maintenance hot (or should it be cold?) spots are – they are likely to be on sections that have already been identified as being in poor condition – and how much reactive maintenance expenditure has risen as a result of severe weather (i.e. compared with normal).

In the overall reporting of condition (National Indicators) the effects of this winter (and the severe weather in February 2009) are most likely to show up on lengths of the network that have not been well maintained over recent years, where both visual inspection defects and machine survey defects will be more extensive, leading to comparatively small changes in the overall condition of the network.

## Contact details

You are welcome to pass a copy of this newsletter on to anyone else who may be interested in the subject.

If you wish to be added to (or removed from) the circulation list please email your details to us at [newsletter@ukpms.com](mailto:newsletter@ukpms.com).

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