

Going for gold

Graham Edmond, the head of network maintenance at Transport Scotland, concludes his two-part article on 2014, maintenance and the future



Graham Edmond

As I write, Team Scotland is celebrating its best-ever medal total at the Commonwealth Games in Glasgow; an event which has given the world an outstanding window into the best that Scotland can deliver. However, as the marathon TV coverage made its way through the city, my road maintenance eye was inevitably drawn away from the athletes to the road surface, the drainage, signs and road markings - I have to say it looked quite good!

I explained last month some of the background to our Pavement Forum and our TS2010 surfacing specification. One radical change in this is that no minimum requirement for initial texture depth is specified. Instead, all new surface courses are required to be tested at four weeks and six months using a GripTester. Data is also being collected on older surfacings for comparison purposes. It is intended the information will be analysed and shared through the Pavement Forum to designers to improve their knowledge and assist them in the selection of aggregates on a scheme by scheme basis with an overall objective of increasing durability and sustainability. *But is this all making a difference?*

Inspection panel

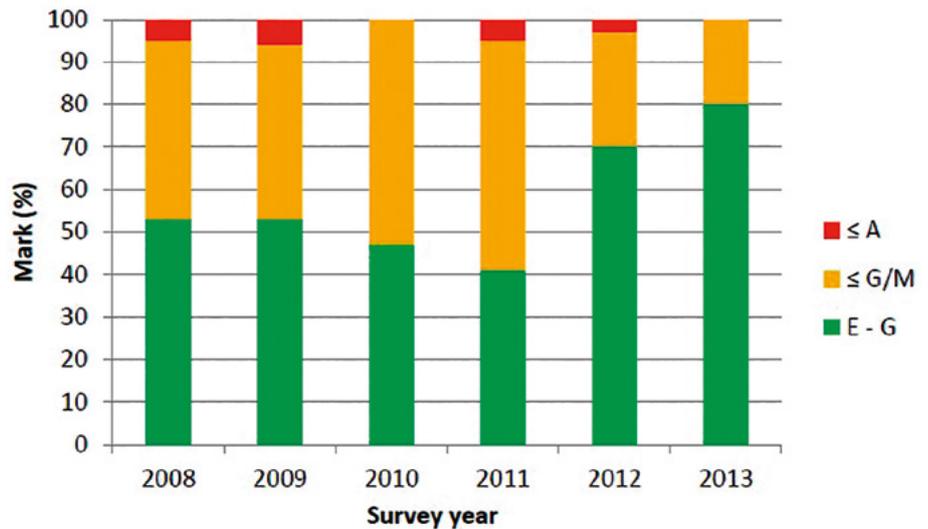
It appears so. To assess the performance of road surface courses laid on the trunk road network, the Pavement Forum introduced an annual monitoring procedure in 2008. Each year a team of engineers with a cross-industry membership (the Scottish Inspection Panel or SIP) assess the visual condition of a selection of surface courses that are approximately two years old. The 2013 SIP survey assessed 80 per cent of the two-year-old surfacing sites as performing very well. A comparison with the SIP 2008 to 2012 surveys showed that the surface courses received the highest percentage of excellent and good markings to date.

Climate change adaptation

Of all of the challenges we face, climate change is perhaps the most important. We have set challenging targets for carbon reduction but these must be equally balanced by those for adaptation. Transport Scotland leads the transport sectors adaptation work

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The diagram above shows the Scottish Inspection Panel (SIP) results for 2008-2013

for the Scottish government and as well as my maintenance role I am also managing this work for the Agency. Road transport in particular is critical to the functioning of the economy, even more so in parts of Scotland where isolated rural communities face lengthy and costly diversions when road links are cut by flooding, landslides or fallen trees. Last month *Highways Magazine* carried an article on the A83 Rest and be Thankful which has been the focus of Transport Scotland's work in the last few years. Predictions suggest a stormier and wetter climate in the future and the A83 has certainly provided regular reminders of this!

I have a few old books about road construction and maintenance. One of these includes cross sections of a well-drained road. Good guidance then and now. Adaptation does not need to be complicated. Adaptation has however been the poor relation to its sexier “mitigation” cousin. If you haven't yet done so I recommend reading the recently published DfT Transport Resilience Review in which Richard Brown CBE provides some excellent conclusions and recommendations. Of particular merit is the suggestion

that proper investment is made in maintaining existing assets, that collaboration is encouraged and communications strengthened. Events such as the winter of 2013/14 are excellent wake up calls and I welcome that adaptation is being moved up in national and political consciousness. Climate change adaptation needs more than a knee jerk reaction however. Long-term thinking and investment are both necessary. Road engineers must continually remind our customers of the benefits of a well-adapted road network. Transport Scotland has ensured that our new roads and railways are future proof but retrofitting the 95 per cent or more of the existing network untouched by the new investment is a much more difficult task. This doesn't mean it shouldn't be tackled.

Regardless of what we face in the future, good maintenance will become increasingly important to ensure all in society can continue to enjoy living in a thriving country. If we get it right, by applying a bit of the innovation, pragmatism and collaboration that is needed then perhaps a few more gold medals will be won – next time by the road maintenance industry! ☺