apse membership resources

Briefing 17-52 December 2017

Highways and Winter Maintenance: Trend analysis 2016/17

This briefing provides details on the performance information available from APSE's performance networks service looking at performance indicators and current policy issues for councils who deliver highways and winter maintenance services.

Key issues

- Percentage of damaged roads made safe in target times has increased again this year to 91.26% - the highest percentage since it was first collected in 2011-12.
- The condition of principal roads in Scotland and England/Wales remains broadly static. However the condition of non-principal road in England/Wales shows further steady improvement.
- Third party claims continue to fall due to a more robust defence regime.
- Winter maintenance spending continues to fall. Whilst weather is a significant determinant, several mild winters may have provided a false sense of security!

Overview

The APSE performance networks performance indicators for highways and winter maintenance cover the cost, productivity and quality elements of the services. This analysis aims to provide participating authorities with an overview of service trends, what this infers and what further activity and analysis individual authorities and the APSE highways, winter maintenance and street lighting benchmarking group could consider. The analysis in this summary is based on averages across all family groups for the last 5 years.

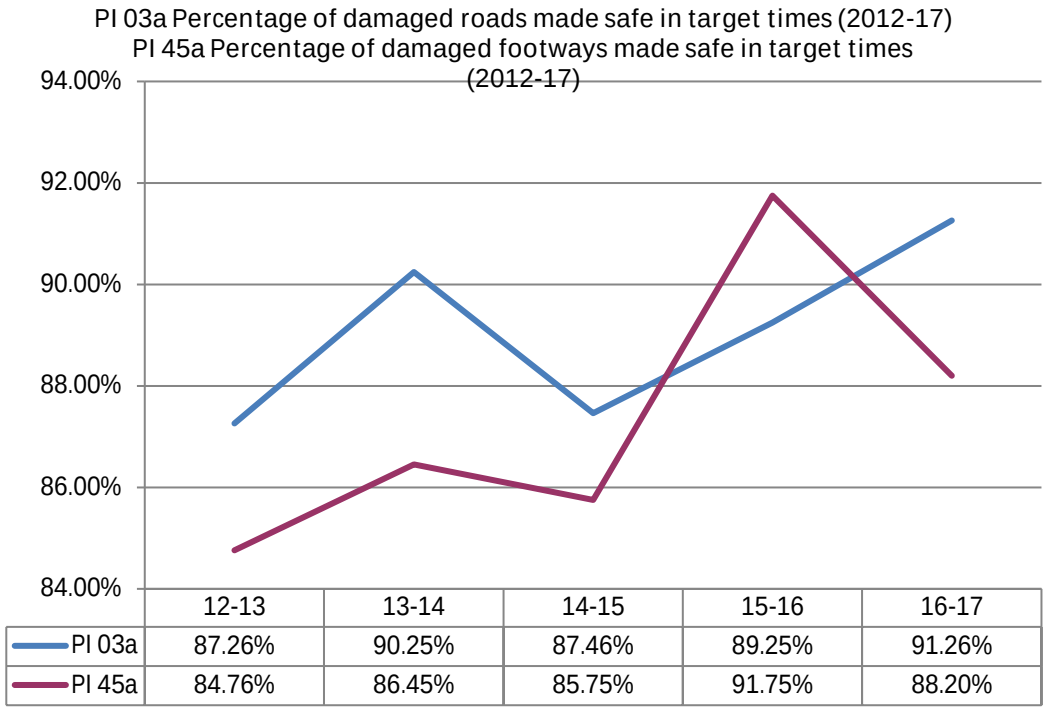
Trend analysis

Particular points of interest are as follows:

Carriageways and footways

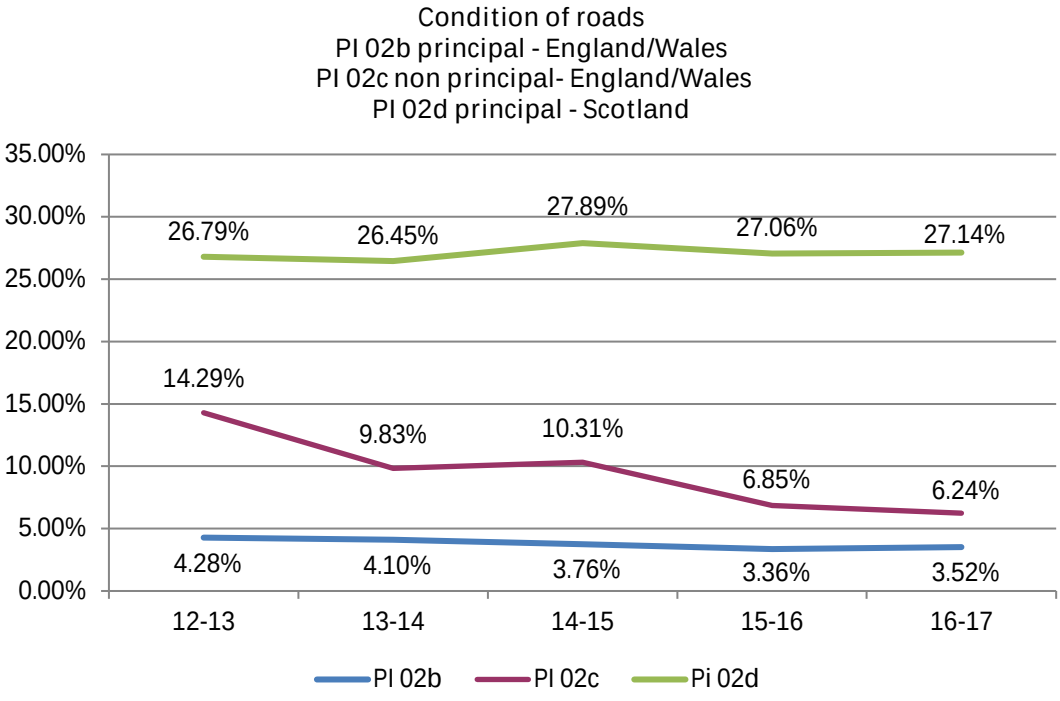
PI 03a and PI 45a show the percentage of damaged carriageways and footways made safe within their respective target times. The figure for carriageways has improved steadily over the collection period whilst that for footways has declined.

The 5 year trend for both damaged road and footways remains positive at 91.26 (PI 03a) and 88.20% (PI 45a) showing continuing improvement in both areas.



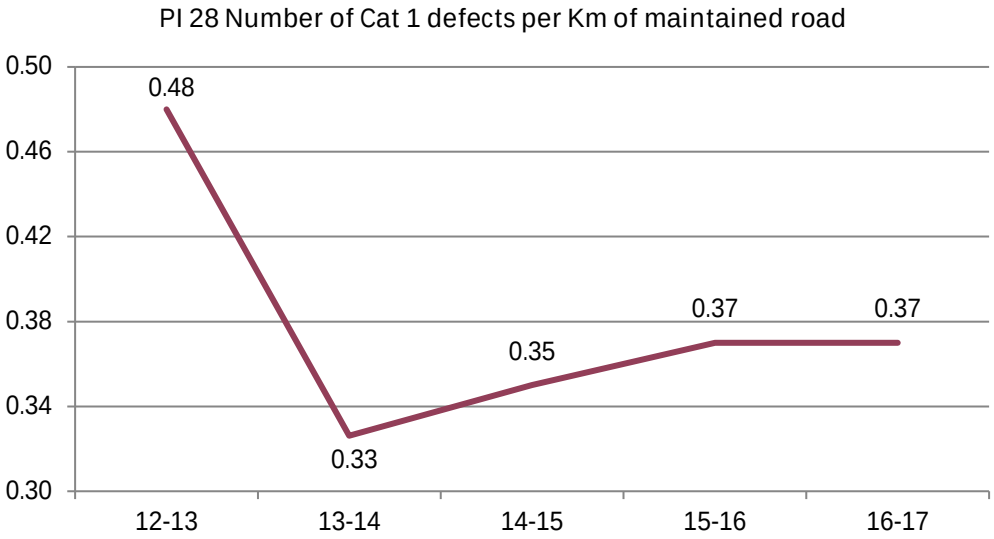
	12-13	13-14	14-15	15-16	16-17
PI 03a	87.26%	90.25%	87.46%	89.25%	91.26%
PI 45a	84.76%	86.45%	85.75%	91.75%	88.20%

The performance indicators for the condition of roads in England and Wales are PI 02b (principal roads via TRACS) and PI 02c (non principal roads). In this case the lower the percentage needing attention the better. PI 02b, covering the condition of principal roads, continues to show an improvement since 2011/12 and has been steady over the past 6 years currently set at 3.52% of the principal road network.



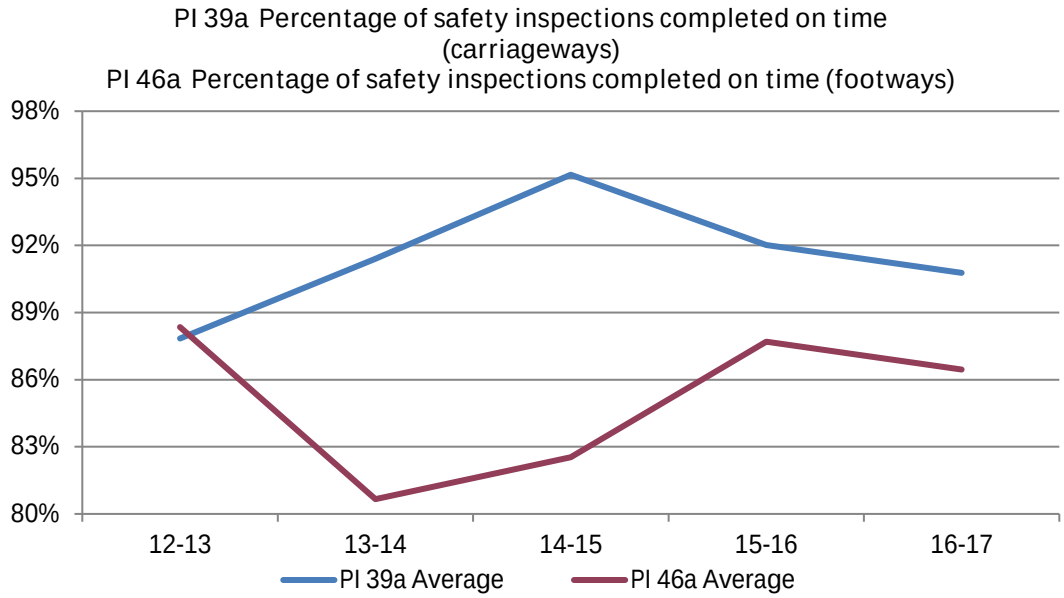
The non principal road condition (PI 02c) covering Wales and England has improved significantly to 6.24%, more than 50% better than 2012/13 and the lowest on record.

In Scotland PI 02d (principal roads via SMRCS) has remained stable, averaging 27.14% in 2016/17. There are a number of factors influencing the condition of roads and although the weather is one, historical investment will have a greater effect. The increase in capital funding in England allied to the asset management approach taken across the UK should lead to a focus on principal roads in terms of planned work and a resultant improvement in condition. Clearly local authorities will have to keep a lid on reactive works although revenue spend continues to be an area of concern.



PI 28 shows the number of category 1 defects per kilometre of maintained road. This has declined over the past 5 years and is currently flat-lining at (0.37).

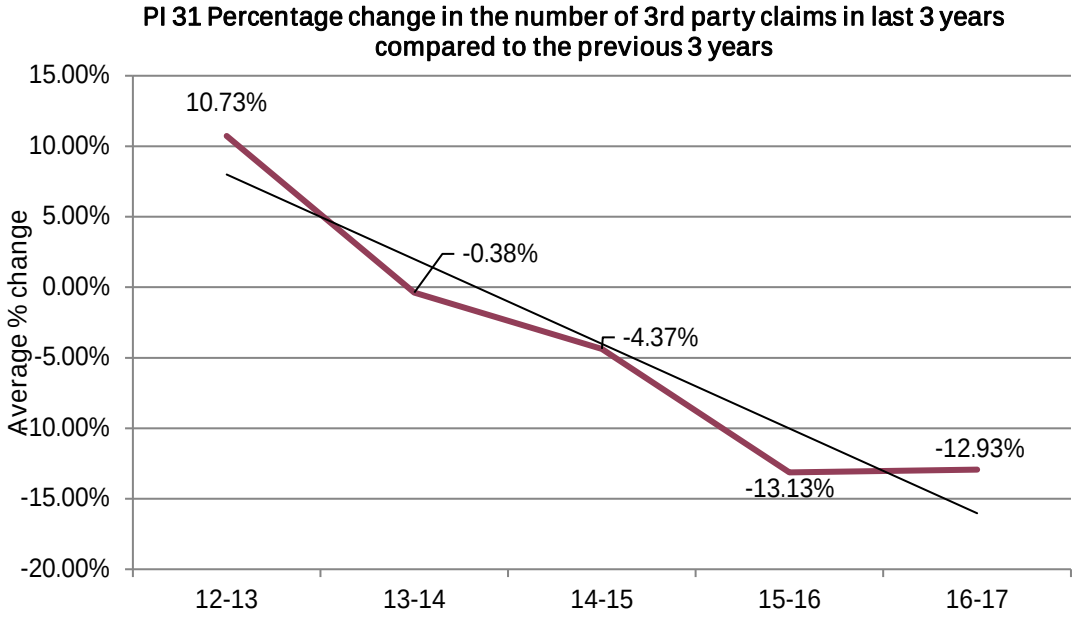
Category 1 defects remain highest priority for highways managers and it would appear that reductions, since a high of 2012/13, reflect a focus on this issue. Maintaining these figures will have a big impact across the network and this can be seen as a success story for the sector.



The percentage of carriageway safety inspections carried out on time (PI 39a) has improved from an average of 88.33% in 2011/12 to 90.47% this year. Although this has been a slight reduction from the previous year, the percentage has remained over 90% for the past 4 years.

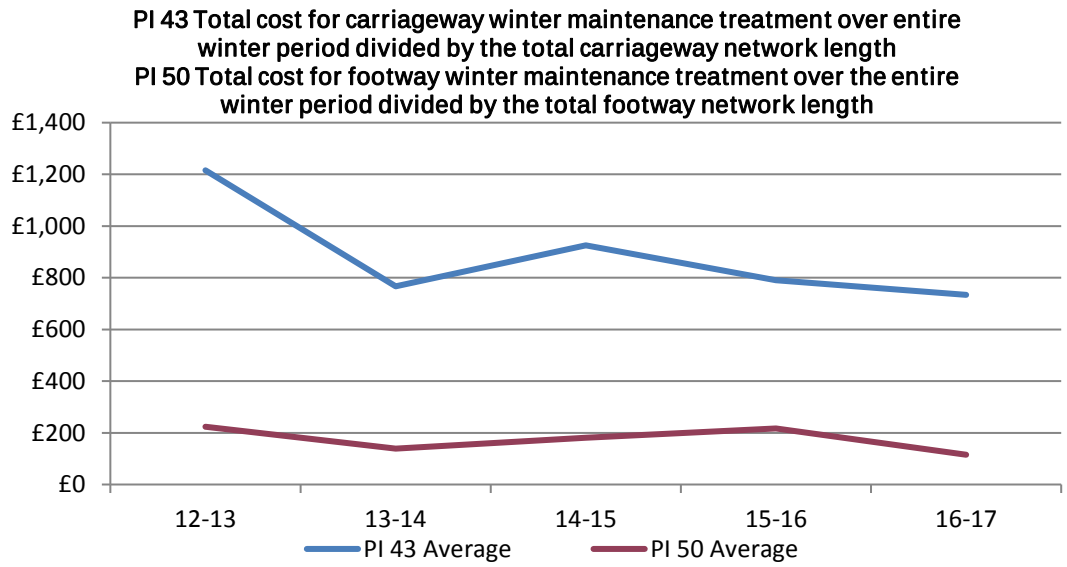
For footways (PI 46a) it has reduced from 87.29% in 2013/13 to 86.46% in 2016/17. Although the figures continue to show a higher focus on the highway rather than the footway, we can see from the figures above that there has been no marked deterioration in either over the past 5 years.

The area that has seem the most dramatic change is that of 3rd party claims (PI 31). In 2016/17 the fall was 12.93% representing a continued downward trend. This is undoubtedly due to a more robust approach to defending spurious claims combined with the continued improvement in response times.



Winter maintenance

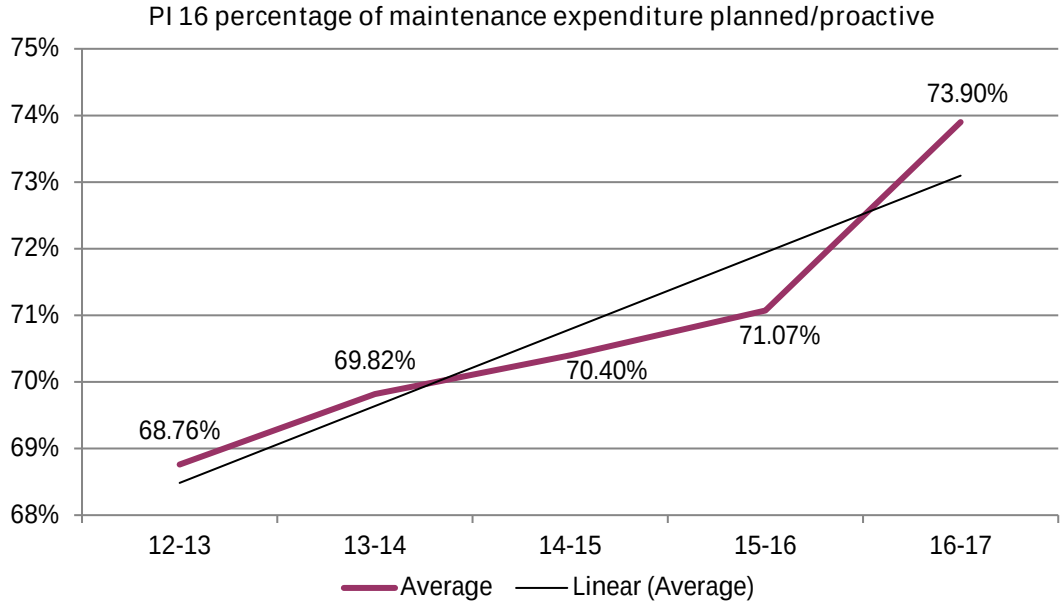
There are 2 PIs which reflect the total cost for carriageway (PI 43) and footway (PI 50) winter maintenance treatment over the entire winter period divided by the total carriageway/footway network length.



PI 43 covering carriageways stands at £733.75, having further decreased on 2015/16 and a substantial 40% reduction on 2012/13. The cost of footways has similarly decreased from £223.53 in 2012/13 to £115.21 in 2016/17; a 48% reduction in cost. These substantial reductions will partly be due to an improvement in technology and better forecasting and hence less gritting. However it may also reflect several years of mild winters and a softening of sentiment, which a harsh winter will undoubtedly expose

Combined asset types

The average percentage of actual maintenance expenditure which was planned or proactive (PI 16) in 2016-17 stands at 73.9%. This shows another significant improvement above the longer term trend and a year on year increase over the last 5 years.



As noted above, recent guidance points to long term asset management as the method most likely to lead to a well maintained network. The push towards more planned work has been a focus within the sector for the last few years.

Traffic management systems

The percentage of traffic management system faults rectified within target times (PI 55) has remained above 92% since 2013-14, with the current figure being 94.46%. The percentage rectified on first visit (PI 56) has been above 88% in the same period currently at 90.05%. Both have shown year on year improvement.

Bridges and structures

PI 300 and PI 301 look at the percentage of principal and general inspections carried out on time and the average figures for 2016-17 are 79.37% and 88.41% respectively, both showing a slight improvement on 2015-16.

The average percentage of council owned bridges failing European standards (PI 304) is 2.82%, which is a new low, a significant improvement from 4.44% in 2013-14 and a slight continued improvement on the previous year (2.92%).

Staff absence

Front line and all staff absences has remained unchanged over the last year at 3.84%. This is still a 5 year low and mirrors similar falls across other service areas. Longer term trends in sickness absence have improved but reduced staff numbers and loss of experience and expertise in many services will inevitably lead to increased pressure on remaining staff to continue to provide services.

Interpretation of data

Highways services remain one of the most visible and influential of all local authority delivered services. The asset is the most valuable councils own, there is an impact on both the day to day activity of nearly everybody as well as the economic performance of the UK as well as it attracting more than its fair share of national and local publicity.

Highways investment announcements by Westminster and the devolved governments has been increased significantly over the past 2 years. This has been coupled with a promised £1.2 billion local roads funding to local government in England to improve roads, cut congestion and improve journey times. What cannot be argued is that Highways is higher up the political agenda than for some time, which is welcomed, and improved maintenance regimes are bearing fruit on non-principal roads. As an essential service APSE would welcome further and on-going investment.

Overall the network remains in a relatively healthy state bearing in mind the existing condition and previous levels of under investment. Over 50% of English and Welsh Highways have a residual life of over 15 years and a further 30% between 15 and 5 years (Alarm survey 2017)

Heavy rain, flooding and high winds in addition to snow on the Highway network continues to impact on Highway services, having profound effects on local areas and requiring the full co-operation of all partners to minimise disruption to local communities. These severe weather events have a long term impact on the condition of the network and it appears that although specific elements of the network might be improved, overall investment has not improved the condition of the entire network.

Overall priorities such as investment, skills and capacity as well as innovation and technology will continue to play a major role in the highways network.

Rob Bailey

APSE principal advisor