



Highways and Winter Maintenance: Trend analysis 2015/16

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 and footways made safe in target times has increased this year, with footways seeing the most significant jump to 92.13%. The highest percentage since it was first collected in 2011-12.
- All three indicators relating to condition of roads (principal and non principal in England/ Wales and principal in Scotland) continue to show improvement. With both England/ Wales indicators at their lowest percentage since 2011-12.
- Category 1 defects per kilometre has varied over the years but has been relatively steady for the past three years and currently sits at its lowest number, reflecting a focus on this issue.
- The average percentage of council owned bridges failing European standards this year sits at 2.77%, a significant improvement on the 2013-14 figure, where it sat at 4.4%.

Overview

The APSE performance networks performance indicators for highways and winter maintenance cover the cost, productivity and quality elements of the services. This executive summary 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 executive summary is based on averages across all family groups for the last seventeen years.

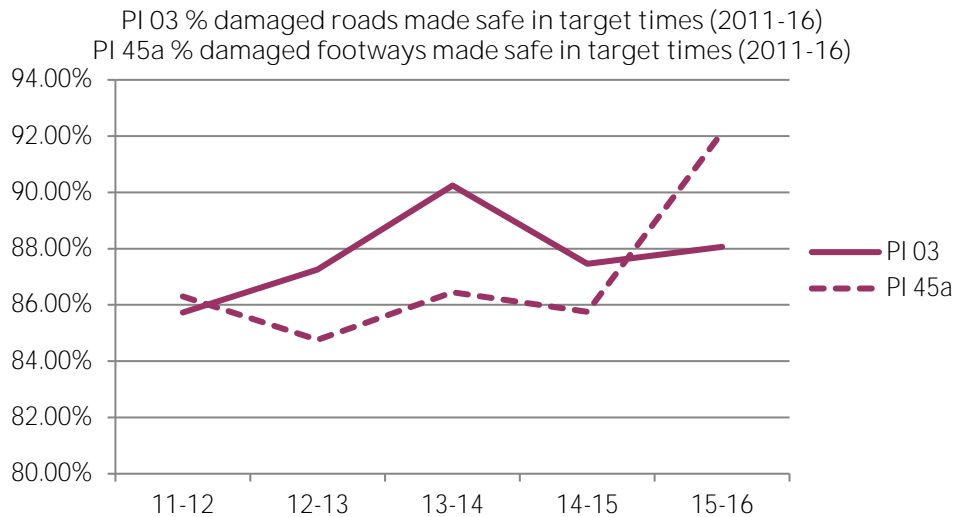
Trend analysis

Particular points of interest are as follows:

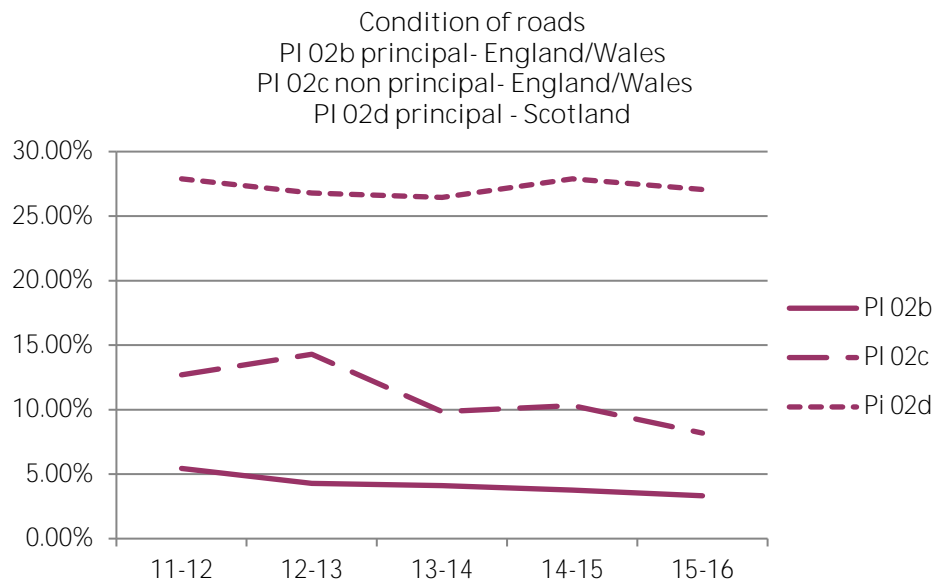
Carriageways and footways

PI 03 and PI 45a show the percentage of damaged carriageways and footways made safe within target times respectively. The carriageways figure had improved steadily over the collection period. There was a slight improvement on average in 2012-13 and again in 2013-14 up to a figure of 90%.

Although this figure reduced for both of these measures last year to 87.46% (PI 03 roads) and 85.75% (PI 45a footways), both have shown an increase this year. PI 03 (roads) has witnessed a slight increase to just over 88%, with PI 45a (footways) seeing a significant jump to 92.13%. It is possible that the increase in the performance of footways could be due to the milder winter experienced, enabling greater resources to be utilised and more work to be focussed within this area. The footways indicator has been collected for 5 years, with this year showing the first significant increase in performance.



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 principal roads continues to show an improvement in the condition of roads since 2011-12 and has been steady over the past 5 years currently set at 3.32% of the principal road network.



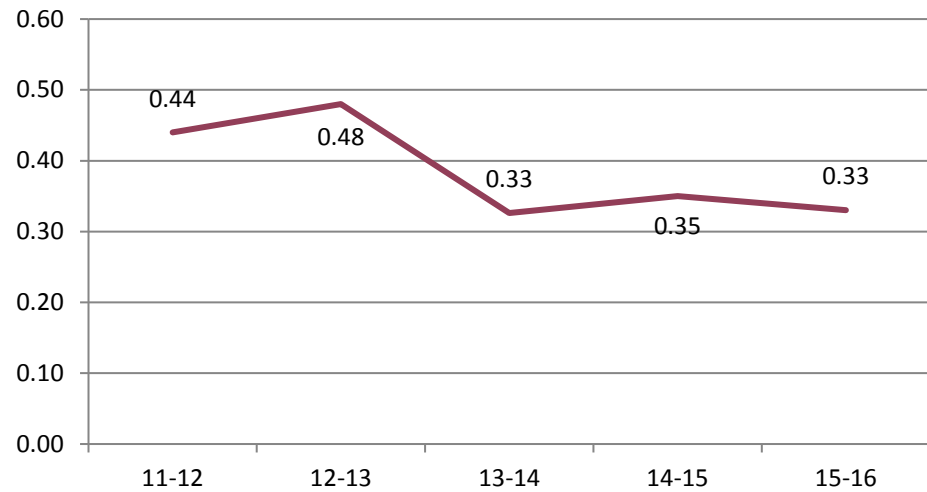
The non principal road survey (PI 02c) had remained relatively steady around 12% and has fluctuated over the past 3 years, increasing to slightly over 14% in 2012-13 and showing a drop to around 10% on average in both 2013-14 and 2014-15. The most recent figure is 8.18% which is in line with the general trend of gradual improvement of the non-principal road network.

In Scotland PI 02d (principal roads via SMRCS) has improved from 27.89% in 2011-12 to an average of 27.06% in 2015-16.

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.

There are priorities to be set when spending budgets and reductions in overall spend has implications for highways funding. When looking at spend on footpaths, the percentage of fabric maintenance expenditure that was spent on footpaths (PI 24) reduced significantly from just over 25% in 2007-08, to 12.2% in 2010-11. This is a substantial decrease and most likely reflects the pressure on services as a result of severe winter weather on the highway. The rate has continued to stabilise since then at 12% and 16%, with the current figure being 15.44%.

PI28 Number of Cat 1 defects per Km of maintained road



PI 28 above shows the number of category 1 defects per kilometre of maintained road. This has varied over the past 10 years but it currently stands at its lowest (0.33) exactly the same as 2013-14 and just 0.02 difference in the previous year. Category 1 defects remain highest priority for highways managers and it would appear that reductions since a high of 2009-10 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. Seeing significant reductions in serious damage reflects well on all involved in service delivery.

The percentage of carriageway safety inspections carried out on time (PI 39) has improved from an average of 88.3% in 2011-12 to 91.85% this year. Although this has been a slight reduction from the previous year, the percentage has remained over 90% for the past 3 years. For footways (PI 46) it has reduced from 87.3% to 80.7% and then increased to 82.5% last year, with a further increase witnessed again this year reaching 84.4%. Although the figures continue to show a focus on the highway rather than the footway, we can see from the figures above that footways are continuing to increase towards the 87.3% figure recorded in 2011-12.

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.

The former covering carriageways stands at £799, having increased to £925 the year before – equivalent to a decrease of just over 14%. The cost of footways has increased from £139 in 2013-14 to £181 in 2014/15 and now reaching £216 in this year – an increase of just under 56% since 2013-14. Severe weather will clearly have an impact and there continues to have been a greater focus on footway gritting recently compared with previous years.

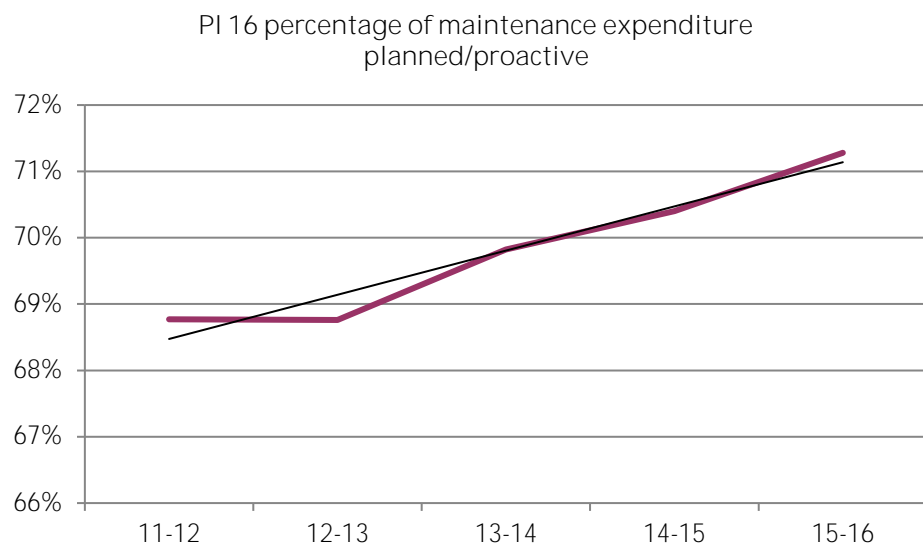
The total cost per km of carriageway (PI 57) and footway (PI 58) travelled for precautionary treatment is £58.21 and £680.83 respectively with the carriageways cost increasing from £27.64 last year but the footway cost seeing a reduction of £103.94 from the previous year (£784.77 in 2014-15). These figures do fluctuate with weather conditions. The cost of footway gritting is still more expensive due to the nature of the smaller areas covered and the resources needed. There has also been an increase in the length of footways where precautionary gritting has taken place over recent years.

Government guidance has pointed councils towards greater levels of resilience and most have far bigger salt stocks now than in previous years as well as having invested in storage facilities, vehicles, ploughs, training and other elements of the service.

There is public demand for gritting on a greater extent of the footway network, outside shops on major pedestrian routes and at shopping centres and this continues to be a priority in some councils.

Combined asset types

The average percentage of actual maintenance expenditure which was planned or proactive (PI 16) in 2015-16 stands at 71.28%. This is very similar to the previous year (70.40%). Although this figure has fluctuated over the period of data collection, the percentages have remained between 67% and 71% since 2008-09. 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. The data from Performance Networks has remained steady over this period and certainly has fluctuated less than previous 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 93% and the percentage rectified on first visit (PI 56) has been above 88% since this same date (currently 89%). Although there is some variety in the individual results for local authorities there is no doubt that rectifying faults continues to be seen as vital in helping to keep traffic flows moving.

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 2015-16 are 79.11% and 84.94% respectively. Although both of these show a very slight decrease on the previous year 2.17% (PI 300) and 0.24% (PI 301) both do still show an improvement on year 2013-14 (PI 300 78.79% and PI 301 82.88%). The average percentage of council owned bridges failing European standards (PI 304) is 2.77%, a significant improvement from 4.4% in 2013-14 and a continued improvement on the previous year (2.89%).

Staff absence

Front line and all staff absences have gradually improved over the duration of the collection period. The average figure for PI 54a, the percentage of staff absence for all staff has fluctuated in the past few years. The figure dropped from 3.95% in 2012-13 to 3.86% in 2013-14 but increased in 2014-15 to 4.76%. The figure has however dropped this year to its lowest across these past 4 years to 3.84%. Staff absence is an area where poor performance can increase costs and inefficiency heavily so it is imperative that good procedures are in place to minimise it. 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.

Recent government activity has highlighted investment in response to flooding, severe weather, pot holes and pinch points and funding appears to be moving away from an overall grant to be allocated as the local authority sees fit, to a bidding process for individual pots of money. Some would argue that this money is not new funding at all but is simply a re-allocation of existing funds.

Following the release of the Spending Review 2015 (21 July 2015) APSE highlighted that reductions in revenue funding have left a significant problem for the highways sector and although investment schemes for specific areas such as high volume of traffic or new structures are greatly welcomed, the existing network requires constant investment. Reductions in revenue funding are hitting **the day to day work of local authorities'** highways team and functions such as reactive repairs, pot hole treatments, gully work and signals maintenance.

Overall the network remains in a relatively healthy state bearing in mind the existing condition and previous levels of under investment. There is a significant sum still to be invested in the network (£11.8billion according to the ALARM survey) if it is to be brought up to an acceptable standard. An acceptable standard is of course open to interpretation and there is a case for managing expectations in this regard. One argument put forward is that by keeping the roads in good condition we are encouraging more cars onto the road network and so creating a cycle of growing demand and costs for the network. As well as a number of car sharing initiatives which are being

promoted to help reduce the number of vehicles on the road, some local authorities have focussed on investing in the cycle network, bus lanes and pedestrian movement in an attempt to increase these forms of transport but it is still the case that the overwhelming majority of spend is on the highway. Attempts to manage demand in this way will continue no doubt but it seems that moving the public away from its reliance on cars will not happen in the foreseeable future.

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.

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