

Purpose

1. To present the findings and recommendations of the Communities and the Environment Standing Committee's review of highways maintenance issues.

Information and Evidence

The Maintenance Backlog

2. We learned that this Authority faces a highway maintenance backlog of £58.5m and that at least £13.7m must be invested during 2010-2011 in order to prevent this from increasing.

Conclusions

3. The backlog is too large and it would be a false economy to allow it to grow further. As it is, the prioritisation of repairs means that some work never rises to the 'top of the list' thereby becoming a permanent part of the backlog.
4. There should be no reduction in the budget for highway maintenance since this would risk the backlog increasing and potentially reaching unrecoverable levels.
5. Detailed research should be commissioned to look at how a system of area budgets might successfully operate. The purpose of this system would be to ensure that within any given area, necessary works eventually get done and are not de-prioritised to the bottom of the backlog list permanently.

Surface Dressing

6. Surface dressing is a commonly used technique for extending the lifespan of the highway by sealing the surface with bitumen emulsified with water and then adding chippings to make the surface more durable and skid resistant.

7. 'Simple' surface dressing which is used at many locations but not stressed sites such as junctions can cost as little as £2 per square metre.
8. The application of a surface treatment at an appropriate time can, arguably, extend the life of the highway indefinitely.
9. Currently, the Authority spends around £900K per year on surface dressing – that equates to renewing the surface of the roads approximately every 60 years.
10. At current levels of spending and continuing to undertake surface dressing, it is inevitable that lower category roads will fall well below current acceptable levels. An approximate three fold increase (around £3m) is needed in order for roads to remain at the current 'acceptable' level of condition.
11. If roads are allowed to slip too far below the 'level of acceptability' then surface treatments will be insufficient to repair them and the roads will need reconstructing.

Conclusions

12. Surface dressing is an essential means of extending the lifespan of roads.
13. As part of the 'spend to save' principle, in order to avoid the massive expense of reconstructing roads, there should, ideally, be a three fold increase in the funds available for surface dressing.

Best Practice – Worcestershire and Staffordshire County Council

14. We learned about Worcestershire and Staffordshire County Council's 'Project Patch' – a project to identify and utilise best practice in highway maintenance.
15. At the commencement of the project the following areas for potential improvement were identified:
 - different methods across depots
 - repeat visits to failed potholes
 - expensive proprietary mixes
 - inconsistent programming of work
 - limited information for the customer
 - poor selection of appropriate repair type
 - supervisors pushing paper not productivity
 - significant administration.

16. The project identified the following solutions in relation to finding and programming defects:

- investment in training of inspectors
- identification of method of failure
- using the correct type and size of repair
- utilising programming and planning tools
- clustering defects for repair by priority locality and repair type
- using an integrated programming and resource desk
- using locally based repair teams.

17. The project identified the following solutions and outcomes in relation to productivity and efficiency on site:

- 'getting it right first time'
- investment in training of patching crews
- material at correct temperature all day
- labour and plant costs halved
- better longer lasting repairs focussed on increased public satisfaction.

18. Project Patch also highlighted the financial benefits which can arise from using larger 'hand lay gangs' for highway maintenance. The economies of scale in producing repair material are set out in the table below.

Larger hand lay gangs	£75/Tonne
Small patching gangs	£100/Tonne
Traditional Pothole Patch	£150/Tonne

19. Additional costs details are as follows: the output of a small patching gang per day is 7 tonnes at a cost of £700, whereas the cost per day of a larger hand lay gang is £1875 per day, but with an output of 25 tonnes.

20. The benefits arising from Project Patch are quantified and described as follows:

- labour and plant costs reduced by 50% per tonne
- fewer repeat failures
- cost savings between £150K to £500K
- programming work from fewer or single locations
 - greater consistency
 - improved efficiency
- better, longer lasting quality of repairs
- focus on increasing public satisfaction.

Conclusions

21. This Authority may benefit from adopting some of the policies and processes highlighted by Project Patch, particularly around economies of scale. The Authority should undertake a detailed audit of highway maintenance processes along the lines of Project Patch in order to promote best practice.

Co-ordination with Utilities Companies

22. Utility companies with the statutory right to work on the highway are known as statutory undertakers. Their activities are monitored by utility regulators such as OFWAT (water), OFCOM (telecoms), and OFGEM (electricity and gas).
23. The rights and responsibilities of statutory undertakers are set out in relevant legislation such as the New Roads and Street Works Act 1991 (NRSWA). The NRSWA is enabling legislation supported by regulations and codes of practice and is updated by the Traffic Management Act 2004 (TMA).
24. Nottinghamshire County Council (NCC), as a local highway authority, has a duty to manage the network under the TMA with a view to keeping traffic moving. As a street authority for public highways NCC must co-ordinate works of all kinds.
25. Failure by undertakers to fulfil their obligations (e.g. proper reinstatement) may result in prosecution. NCC has successfully prosecuted a number of utility companies under the NRSWA and prosecuted British Telecom in relation to 'out of guarantee' reinstatements resulting in the development of case law which reinforced the responsibility for reinstatement.
26. There has been research undertaken into the long term effects of excavation and reinstatement and the impact of work albeit to the correct standards, on the life of a highway structure. The research supports the suggestion that the life of a highway is likely to be reduced and therefore there is an inherent cost to the highway authority due to the expectation that maintenance will be undertaken earlier than would be the case had no excavation taken place. It may be argued that this is an additional cost to the highway authority. However, the research has yet to be translated into any meaningful regime of work or payment by utility companies whose counter-argument stresses that they provide essential services which cannot be provided without excavation in the highway and that it would be a common customer (the general public) who would pay for any additional work.

Conclusions

27. Sample inspections of completed reinstatement by utilities companies are undertaken on a random basis by statutory

requirement. In addition to these inspections, there may be some benefits to targeting inspections at poor performing reinstatement teams.

28. The issue of long term damage to the highway as a result of excavation by utility companies is one that needs addressing by a range of appropriate measures at national level – it is not just a problem for Nottinghamshire.

Highway Insurance Claims

29. We learned that highways related claims amount to a significant portion of the Authority's public liability claims. Of the 580 claims received so far for 2009/2010, 522 related to the Highways Division (90%).
30. This figure will include claims that do not relate to the maintenance and inspection of the physical highway but the majority do relate to the highway. Other claims may include tree root damage, utilities damage, incorrect search information, stones thrown up by grass cutting equipment.
31. The table below sets out the relevant headline figures in relation to highway claims:

Policy Year	Amount Paid to date	Estimated Outstanding	Total (Paid and Outstanding)	Number of Claims Made
2009/10	£10,990	£2,332,990	£2,343,950	522
2008/9	£135,935	£2,844,545	£2,980,481	555
2007/8	£406,590	£1,831,355	£2,237,905	637
2006/7	£605,580	£2,852,386	£3,457,967	608
2005/6	£613,747	£150,417	£757,196	621

32. The estimated outstanding figure represents the amount that claims may finally be settled for when they are concluded. Figures for recent years may increase since claimants have a number of years in which to lodge a claim – the table cannot make allowance for the number of reported claims which may be repudiated. Figures from around 3 years ago represent a more accurate indication of the sums which may be paid. Estimates on individual files are reviewed every time a file is dealt with and on a three monthly cycle.
33. The County Council has always believed in retaining significant portions of risk itself. This is because external insurance for attrition losses is generally considered to be a costly pound swapping exercise. In relation to Public Liability Insurance (under which Highways Claims would be dealt with) the Authority self-insures for the first £100,000 each and every loss. Above this level external insurance policies are purchased via Chartis Limited (up to a £50 million limit) and a

catastrophe layer is purchased through QBE Insurance (for the difference between £50million and £60million).

34. Our £100,000 self-insured retention of each and every loss is not limitless. We buy aggregate stop loss protection, which means that a maximum limit is placed on the total amount we would have to fund in a policy year across all claims. In the current policy year this is £4.25million.
35. In order to fund losses the Authority expects to bear in a policy year an insurance fund is maintained which is financed through internal charges to departments. The structure of this charging is largely historical with annual inflationary increases being applied. A more sensible approach to this is to charge on the basis of exposure presented under the policy. For example, firstly the size and type of activities of the department is considered and then its contribution to the loss profile of the organisation. This is the sort of allocation process employed in other self-insuring authorities and large corporate organisations.

Conclusions

36. The operation of the insurance fund should be reviewed to ensure that it operates in the fairest way possible – for example perhaps creating a link between highways maintenance performance and the department's financial contribution to the loss profile. It is acknowledged that this might have implications for how insurance operates for other departments.

Members' Concerns

37. Speaking from experience within their own electoral divisions Members of the Committee particularly wished to register a concern about the supervision of highways department staff when they are undertaking highway maintenance activities such as surface dressing. Members spoke of seeing surface dressing laid on top of weeds, excess chippings not swept from footways, water being sealed in and surface dressing without the potholes beneath being filled.
38. Members of the Committee have referred to many repairs within their electoral divisions, particularly repairs to potholes, where return visits by highways maintenance staff have been required. It is essential that planning and delivery of maintenance work is carried out correctly the first time – the need for return visits would be eliminated and no public money would be wasted.
39. How roads and footways are maintained is a matter of great interest to local communities. It ought to be possible to engage more effectively and extensively with local residents and elected Members in order to take into consideration what local people really want when maintenance work is planned.

40. Scrutiny Committees gather information from within this local authority and from external organisations and individuals when they are conducting a review and then address the issues they have encountered by way of evidence-based recommendations. Scrutiny Committees are therefore reliant on the information they receive. In this context, it would have been extremely useful if the committee had received information regarding the restructure of the Highways Department at the **commencement** of the Scrutiny review rather than at the end. As developments and changes take place within the department the Scrutiny Committee Members should be kept informed by officers, particularly when invited to speak at the meeting. This is central to the formation of draft recommendations and the planning of future meetings within the Scrutiny review and a point that should be taken on board when future reviews are conducted.

Recommendations

41. It is recommended that this Authority should:

- 1) Conduct a general audit or inspection of the process of repairing minor highway defects –

- with a view to ensuring consistency and high quality
- reducing the necessity for return visits to the same defect
- quantifying the amount of time which should be spent on repairing the various sorts of highway defects with a view to speeding up repairs and improving the management of repair teams

- 2) Following the audit/inspection any training needs for highway repair teams, inspectors and managers should be identified and appropriate training provided.

- 3) Ensure that the programming and planning of highway defect repair clusters repairs by priority, locality and repair type in order to improve efficiency (in a similar fashion to 'Project Patch' as used by Staffordshire County Council).

- 4) Investigate means by which a system of area based budgets (e.g. a rural/urban split) for highway maintenance could be put in place and in light of the restructure ensure that district managers liaise with Member forums in order to receive Member input and enhance engagement.

- 5) Ensure that the area based budget scheme operates in such a way that no single area is overly neglected or de-prioritised, thereby allowing Nottinghamshire residents to receive equitable treatment.

- 6) Campaign* for the development of legislation under which utilities companies must pay for the cost of reducing the lifespan of the highway by

trenching work (i.e. pay for each individual site where they trench with an appropriate matrix devised to cover costs of the work according to size, depth, and likely long term effects) – the scheme should operate as an extension to the current two year guarantee scheme.

*The Portfolio Holder and the Chair of Communities and the Environment should write to the Secretary of State for Transport to raise the issue of long term damage to the highway caused by utility trenching and subsequent to this to send (and continue to send) packages of evidence detailing the long term damage to Nottinghamshire's highway until appropriate legislation has been put in place. Links should also be established with other county councils to see if they wish to participate in the campaign. In addition, the letter should be copied to the Chairman of the relevant parliamentary select committee.

7) Draw to the attention of the relevant parliamentary select committee the issue of the long term damage to the highway caused by utilities companies trenching with a view to this topic being reviewed at a national level.

8) Encourage Parish Councils, Town Councils and local residents to monitor reinstatement work by utilities companies for signs of early deterioration

9) Require utilities companies, irrespective of any inspection regime, to supply electronic images of all reinstatement works that have been undertaken to highway inspectors.

10) create a post of highway reinstatement officer with a specific remit around i) ensuring that all works promoters properly reinstate the highway and ii) dealing with issues connected to long term damage to the highway caused by utility trenching iii) undertaking quarterly inspections of reinstatements during the two year guarantee period.

11) Target some inspections at the work of poorly performing utilities reinstatement teams.

12) Develop a provisional forward plan for all expected maintenance within each electoral division for the following year and communicate these intentions to elected Members before work commences without raising public expectations.

13) Increase the highway budget for surface dressing to £3m – i.e. additional funds, not a re-profiling of money already within the budget.

14) Consult directly with Parish Councils or other representative groups in unparished areas in order to determine local preferences and concerns in relation to highway and footway maintenance when works are planned [since communication is even more important in the current economic climate.

In addition, the Communities and the Environment Standing Committee should:

15) Examine how the highways department restructure is working in 12 months time.

16) Ensure that departmental officers and other external attendees are aware of the need to keep Scrutiny Committees fully apprised of any developments which relate to a topic under review.

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Background papers: none

Appendix 1

Contact Centre Study Visit

On 3rd March 2010, Members from the Communities and the Environment Standing Committee visited Nottinghamshire County Council's Contact Centre in order to learn about how reports of highways defects are dealt with. The Contact Centre has 52 full time equivalent employees and is open from 8:00 am – 8:00 pm.

During the visit Members were able to take the opportunity to listen to calls and were very impressed with the skill and professionalism of the officers dealing with them. Officers handling calls are required to deal with an extremely wide range of subjects and undertake a six week training programme during their induction.

Having the contact centre means that highways department officers are not tied up taking calls – instead the contact centre advisers are able to directly input into the Highway Asset Management (HAMS) system.

The Contact Centre also has the capacity to deal with high volumes of calls (e.g. following a spell of severe winter weather) and thereby represents good value for money.

This Review into Highway Maintenance was carried out between September 2009 and July 2010.

The review was carried out by:

County Councillors:

Sue Saddington (Chair)
Geoff Merry (Vice Chair)
Victor Bobo
Steve Carroll
Allen Clarke
Glynn Gilfoyle
Keith Girling
John Hemsall
Eric Kerry
Keith Longdon
Rachel Madden
Sheila Place
Mike Quigley
David Taylor
Lynn Sykes
Parry Tsimbirdis
Gail Turner

A successful scrutiny review depends on the involvement of a number of different people and we would like to thank the following for their contribution:

Other Local Authorities

David Walters, Staffordshire County Council
Andrew Warrington, Leicestershire County Council

Parish Councils

Andy Gregory, Southwell Parish Council
Mollie Toy, Southwell Parish Council
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Utilities

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