



Efficiencies in Highways Maintenance and Winter Maintenance

Local authority grants were severely cut as part of the Comprehensive Spending Review and this had added to the overall pressure on councils' budgets. Well maintained highways are a fundamental element of a successful economy as well as being a significant factor in ensuring road safety and limiting risk of damage to vehicles. Investing in new highways is one element of the infrastructure but regular maintenance remains vital. The degree to which well maintained highways are taken for granted has emerged over recent years as a result of damage following severe weather and lack of resources to fix pot holes which have arisen. Local road maintenance is one of the most easily recognisable of council responsibilities and their reputation may well suffer as a result of factors primarily out of their control.

1. Service costs

The following table highlights the average percentage spent on each element of the service and is derived from APSE performance Networks data.

Area of cost	% of total
External / sub contracting	27.1
Internal operational staff costs	20.9
Materials	17.4
Client costs	12.4
Equipment	11
Other costs – admin/office costs	5.9
CECs	5.4
Landfill / waste disposal	0.3
Total	100

It must be remembered that these are average costs there will be an element of variety around each of the individual figures. There is no single outstanding area of cost in this service – the first five areas of cost above are all areas where savings could be made such is the level of spend on them. Clearly the area where the level of spend is highest is the area where most savings can be made.

Rather than continue to maintain a specific group of roads, such as all A roads, some councils have decided to reclassify their roads into other categories based on a number of factors. These might include condition, usage, location or investment history with the justification for reclassification being an risk assessment of need rather than a historical process.

2. **External Provision**

The use of external companies to provide highway maintenance is widespread and there is an element of cross counting in the table above where some of the material costs and client costs will be wrapped up in the external/sub contracting costs. The best performing and most efficient councils will by now have well established arrangements with their partners and contractors to the extent where savings are identified between them and acted upon for the benefit of both organisations.

Client costs are a substantial element of cost as identified by the table of averages above. These can be reduced if the relationship between the external provider and the council is based on trust and both are willing to be flexible in their approach. Client costs are a necessary cost and cannot be eliminated entirely.

Clearly in a situation where the council provides the service directly this element of cost can be reduced further but this again is dependent upon a good working relationship between those involved. In this context, if the management, design, technical and operation parts of the function can come as close together as possible, client costs can be reduced to a minimum. Client costs are likely to be highest when a hard split remains between client and contractor. The aim is to achieve a relationship which is close enough to reduce cost and increase trust.

Practical changes such as the removal of internal invoicing, combining administration and reception staff and the use of fewer buildings have helped to reduce costs. External provision of the stores function is also an area of growth. This has previously been more common in building maintenance services than highways and street lighting but the cost storage, and the physical space taken up for highways stores at a time when all assets are being assessed for sale means stores is coming under close scrutiny.

3. **Internal operational staff costs**

Staff costs make up a large part of internal service delivery costs and reduction in numbers of staff is seen by some as a crude way to cut costs where there appears no option. Reduced working hours may be an alternative as may annualised hours.

In some circumstances, re-organisation has led to outsourcing of elements of work, such as highways maintenance whilst directly employed skilled road workers are allocated more generic street scene duties. Although outsourcing may be a local reaction to reduced budgets, the result is that skilled staff lose their skills due to lack of practice or they move elsewhere and the initial investment by the council leaves with them. Either way this is a skill set which is no longer directly available to the council and there will be a future cost to regain those skills if a decision is taken to do so. If integration of street scene services is done properly one result can be an increase in skills enabling the flexible deployment of staff.

4. **Materials**

Materials costs form a substantial part of the overall cost and again are an area where savings can be made. One council has acquired a quarry and so is able to produce, use and sell its own materials and secure the supply at reasonable prices and can oversee control. It produces natural stone, aggregates, macadam and has a concrete plant. This may be an unusual approach but it does show that methods of acquiring materials which have not previously been considered can produce results.

5. **Central establishment charges (CECs)**

CECs remain a contentious area of cost. There is a balance to be found between allocating them in a way which is as fair as possible without moving to the extreme and creating a bureaucracy which accounts for the usage of central services to the smallest degree. The disadvantages of duplicate provision are well known and so should be avoided. By their very nature, the services paid for through CECs are centrally provided and managed. This central point of provision may well be within a specific department if scale warrants it, but however it is managed, the point is that such decisions should be taken with the benefit of the whole organisation in mind.

6. **Winter maintenance**

There are savings which can be made through collaborative procurement which is already widely used in salt procurement. Measures put in place to address salt shortages include reducing the amount of the highway network covered and reducing spreading rates. These will reduce the cost of the service irrespective of the reason for implementing the changes. It may be that these changes should be considered as a cost cutting option.

Some councils are building the requirement into staff contracts that they must be available for winter maintenance driving so that it is considered part of their regular work rather than as an add on if the weather is poor.

The introduction of new technology to work out new routes, mobile working, monitor progress of operations, react to individual incidents and gather information to use in insurance claims against the council are all examples of where councils have improved their performance in relation to their responsibilities and become more efficient. They have also led some councils to turn to single person snow clearance so reducing staffing costs further. Use of relevant technology also enable partners such as Police and Fire and Rescue Services access to information identifying te location of vehicles or incidents they report.

The use of unibody vehicles rather than dedicated spreaders helps to reduce duplication in the vehicle fleet.

7. **Lean and systems thinking**

Lean and systems thinking are very popular approaches for identifying waste and removing costs from service. They begin by process mapping the system of working and splitting it into the constituent parts, highlighting duplication and identifying areas for further examination. In the highways context the aim is to bring together functions like drainage, traffic management, routine maintenance, winter maintenance, flood and water management and numerous others. These have often been considered diverse but some councils have managed to make significant savings by combining them to a point where waste is minimised. Local circumstances mean each solution will be different and savings will only become apparent once processes are studied in detail. An example of this is in North Wales where 2 councils have collaborated closely resulting in substantial procurement savings and the appointment of a joint director of highways and transportation.

8. **Service changes**

There are limitations to the degree to which the costs of a service can be cut without impacting upon the scale of the service. The options considered by individual councils are unique to each but some are considering changes they have never considered previously. Examples include giving snow ploughs over to the community such as farmers or parish councils, and asking them to keep the rural network clear of snow rather than the council spaying them to do it. Another is passing the cost of school crossing patrols to individual schools rather than the council paying for them. Some councils have decided to no longer maintain low trafficked roads on the basis that the number of users does not justify the cost of maintenance. Reductions in highway verge cutting cycles are another option. Clearly these are all decisions which will have to be taken locally, depend upon local circumstances and will have to be risk assessed.

9. **Income**

Taking advantage of opportunities to undertake external work and charge for it is an option open to highways services. Examples might include maintaining roads and lighting such as within hospital sites, airports, retail and other centres. Some councils have decided to increase parking charges and increase revenue that way. Of course there is the chance that these decisions may have unintended consequences such as an overall reduction in parking income. Equally, less investment in highway/footway maintenance may lead to a higher level of third party claims. These are the type of factors which individual councils will have to bear in mind when policy decisions are taken.

10. **APSE Comment**

It can reasonably be expected that funds for highways and street lighting investment will be scarce in future. Councils will have to identify savings and extra sources of income and this is an activity they should be concentrating on on a regular basis. A wide range of benefits have been gained by councils either through small practical changes to the service, collaborating in procurement or service provision or looking at areas of their work which they have previously ignored. There is no doubt that there is scope and pressure for innovative thinking. Technological change is also moving quickly and councils must remain aware of developments and the benefits they can bring.

As with all service areas reductions in staff numbers are being considered in highways services. If this is the case, APSE advocate that the trade unions and staff are fully involved where any changes to the workforce are likely to be proposed.

Should a member authority have a pressing difficulty, APSE has a range of assistance available to inform the search for efficiencies. This ranges from average productivity figures, benchmarking information from APSE performance networks through to full consultancy support from APSE best value consultancy.

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