

The Highland Council
Community Services Committee

28 April 2016

Agenda Item	14
Report No	COM 23/16

Benchmarking of the Winter Service and Winter Policy Review

Report by Director of Community Services

Summary

This report presents the results of a benchmarking exercise which compares the principal activities and resources of Highland Council's winter service with other rural authorities in Scotland and makes recommendation on some changes to the policy aimed at improving the service.

1. Background

- 1.1. A previous report on the winter service was presented to the Community Services Committee on 20 August 2015. Members requested that additional information be sourced and reported back to committee.
- 1.2. The principal reason for benchmarking our winter service with other rural authorities is to ensure that we have the necessary information to compare and if necessary change our practices where required.
- 1.3. To obtain the relevant information a questionnaire was sent out to 5 Councils within the family group of "rural" authorities. These included Argyll & Bute, Perth & Kinross, Moray, Aberdeenshire and Angus Councils.

2. Outcome of Benchmarking Exercise

2.1. Funding of the Winter Service

- 2.2. The budget allocation for the current year (2015/16) was set at £5.22m. Outturn costs will always differ slightly from that set in the budget as costs are dependent on the severity of the winter.
- 2.3. Examination of actual outturn costs over the last 10 years show a high of £7.5m in 2010/11 and a low of £2.99m during the mild winter of 2006/07. Taking the 10 year period as a whole the average outturn costs were £5.33m.
- 2.4. The budget allocation for winter has, over the last 10 years, remained largely static. The consumer price index for inflation over this period was approximately +24%. With a static budget these inflationary costs have had to be absorbed through increased efficiency, route changes and a small reduction in fleet.
- 2.5. Benchmarking our actual spend on winter during 2014/15 shows that Highland

Council spent less proportionally than other Councils. Using a comparison of overall spend to road length shows that Highland spent £810 per km of road; Aberdeenshire £936; Argyll & Bute £1,050; and Moray Council £1,123. These figures give an indication of spend levels but have to be taken in the context that local climate and operational procedures will be different.

- 2.6. To put these figures into context if Highland were to spend similar levels to say Aberdeenshire then an additional £850k per year would require to be allocated to the winter budget.
- 2.7. Benchmarking also revealed that, like Highland Council, budget allocations amongst most of our neighbouring Councils has remained static. However it is noticeable that for winter 2015/16 Argyll & Bute has decided to make 2% savings year on year and Aberdeenshire a one off £800k saving.

3. Fleet Resource

- 3.1. For winter 2015/16 Highland had a total of 105 front-line vehicles (plus 3 strategic spares) available for winter gritting. Benchmarking this resource against other Councils shows Highland to be mid table with regard to fleet resource and the length of road each vehicle is required to treat.

3.2.

Council	No of Frontline Gritters	Ratio of Gritters to length of road network	No of Spare vehicles
Moray	36	1 : 43km	1
Perth & Kinross	41	1 : 59km	0
Highland	105	1 : 64km	3
Argyll & Bute	33	1 : 70km	2
Angus	19	1 : 95km	0
Aberdeenshire	53	1 : 99km	3

This comparison assumes that all Councils treat their entire network on day 1.

4. Route Priority and Length Treated

- 4.1. There are approx 2,160km (1,350 miles) of road within Highland categorised as Primary or 1st priority. This represents 32% of the network within Highland and is the length of road that :
 - receives a pre-cautionary salt in the evening; and
 - is treated first when action is called in the morning.
- 4.2. A question recently raised by Members was how our 1st priority road length compared with other Councils. The table below shows the relative returns.

Council	Priority					Precautionary Treatment
	1 st	2 nd	3 rd	4 th	5 th	
Aberdeenshire	13%	15%	72%			32%
Argyll & Bute		52%		30%	18%	52%
Angus	35%	18%	47%			35%
Highland	32%	22%	46%			32%
Moray	43%	12%	32%	13%		43%
Perth & Kinross	29%	54%	17%			29%

Note: Aberdeenshire actually treat their 1st and 2nd priorities as one so their relative figure would be 28%.

Argyll & Bute Council treat part of the Trunk Road network along with their 1st priority routes

- 4.3. It should be noted that each Council will define its priorities slightly differently so there will be differences in what is classed as 1st priority.
- 4.4. When the proportion of 1st priority routes is considered, Highland compares well with other Councils with only Moray treating a significantly longer road length. When the length of road that receives a precautionary treatment is compared, then again Highland sits mid table, with only Argyll & Bute and Moray treating significantly longer lengths.

5. Footway Clearance

- 5.1. When footways require salting, Community Services calls upon resources from Grounds and Waste operatives. Salt is usually applied using small tractors fitted with blades and gritter attachments. Where these tractors are unable to access parts of the footway network due to access restrictions, hand squads are deployed to manually spread salt.
- 5.2. Highland currently has a total of 44 mini tractors which can be used in the treatment of footways. The numbers of footway tractors currently registered to each Local Committee area is shown in the table below.

Local Committee	Resource
B&S	5
Caithness	8
Inverness	10
Lochaber	2
Ross & Cromarty	9
Skye & Lochalsh	2
Sutherland	8

Note: There are additional mini tractors used for burial duties which are not included in the above figures.

- 5.3. In Highland the treatment of footways generally starts at 7am and, under light ice conditions, the primary footway network is normally treated by 9am. It is clear however that with current resource levels extending treatment onto lower category footways presents a significant logistical burden on the service. The outcome in most cases is that many of the lower category footways do not

receive treatment on day 1 and indeed even by day 2 of the event. This problem is exacerbated in the more rural districts by the need to transport equipment between the villages resulting in some villages not being treated at all.

- 5.4. Benchmarking this activity with other Councils showed a similarity in both work practices and outputs. None of the Councils questioned reported being able to treat all their footways on the first day of a weather event and, like Highland Council, admitted that realistically treatment of the lower category footways would be delayed until day 2 or 3 after the initial event. Even then there was usually a requirement to go back and retreat the 1st priority footways the following morning delaying further the treatment of the lowest category footways.
- 5.5. During extreme weather events sectors of the service continue to be tasked with normal duties when weather conditions may not be conducive to these tasks. An example of this would be street sweeping.
- 5.6. It is recommended that a more proactive approach is taken and better use made of existing resources (as mentioned in item 5.1) even if that means those services are reduced or suspended e.g. street sweeping - during heavy snow resources be switched to manual salting duties and/or replenishing of salt bins.

6. **Vehicular Resource available to treat Footways**

- 6.1. The table below shows how Highland Council compares with other Councils when the mechanical resource is compared against the length of primary footway required to be treated. As can be seen, we are 2nd best of the group and confirms our resource levels as adequate within the context of the other Councils.

Council	No of Footway Tractors	Length of Primary Footways	Ratio of tractors to length of primary footway
Aberdeenshire	47	86km	1 : 2 km
Highland	44	120km	1 : 3 km
Moray	18	73km	1 : 4 km
Argyll & Bute	12	100km	1 : 8 km
Angus	20	300km	1 : 15km

7. **Involvement by third parties**

- 7.1. Benchmarking this part of the service revealed that Highland lags behind other Councils when it comes to 3rd party assistance.
- 7.2. Aberdeenshire currently have in excess of 100 farmers “signed up” to assist during severe weather and Perth & Kinross over 70.
- 7.3. Highland has previously let a tender for the provision of various winter services.

The response at the time was very poor.

- 7.4. There is clearly a market out there but it is evident that small individual farmers/contractors are not interested in the bureaucracy that is involved in local authority tenders. There has to be an alternative process engaged where multipage documentation is replaced with a more informal and simplified form of tender.
- 7.5. It is the intention of the Service to investigate methods of procurement, particularly with Aberdeenshire Council, for use within Highland.

8. Operational Boundary - Action Plans

- 8.1. The lack of consistency of treatment on parts of the road network has been raised by Members and in particular the change in road condition that can occur at operational boundaries.
- 8.2. The treatment applied to the road network during the winter is controlled by a Duty Officer in each of the operational areas. Where a main route crosses an operational boundary then it is open to different interpretations of the weather forecast by each duty officer which in turn can lead to different treatment plans.
- 8.3. Savings agreed at Council on 25 February 2016 included proposals to reduce the number of Duty Officers across Highland to four. This will result in each duty officer overseeing a wider geographical area so boundaries will be operational rather than political and should help in alleviating situations such as this.
- 8.4. It is recommended that the network is reviewed along the lines of entire routes and specifically where routes join the trunk road network. An example of this would be the A835 from Ullapool to Ledmore then the A837 to Ledmore to Lochinver. This is a main artery currently looked after by 2 duty officers. If this route was controlled by one duty officer then there is a greater likelihood that a more consistent service would be provided along its entire length.

9. Salt Storage – Future Strategy

- 9.1. Highland utilises 40 local depots where salt is stored for winter use. The majority of these depots rely on temporary sheeting to keep the salt dry.
- 9.2. As winter progresses protective sheeting is generally rolled back to expose the salt face however winter storms inevitably take their toll and by the end of winter many of the salt heaps are unprotected or badly exposed to the elements
- 9.3. There are only two salt stores operated by the Council which have a permanent cover those being Inverness Harbour and Gairloch. It is clear that these stores have presented significant benefits to the winter operation through more accurate spreading of salt (because it's dry) together with substantial savings through salt not being washed away by the rain. It is generally accepted by the industry that as much as 10% of stored salt can be lost to the elements where it remains uncovered.

- 9.4. Appendix H from the Code of Practice for Well-Maintained Highways recommends that salt is stored in covered barns to prevent leaching, ease handling and maintain low salt moisture content.
- 9.5. It is essential that Highland Council agrees a future strategy on salt storage. It is recommended that the capital plan includes a long term commitment to install permanent salt storage facilities. The programme should target an annual investment of £100k for the next 20 years and target those depots with the highest annual rainfall first eg Strontain, Sconser and Lochcarron. Funding of this investment can be accommodated within the Community Services capital plan by profiling the Vehicles and Plant allocation.

10. Policy Amendments

10.1. Level of Service

- 10.2. Service standards are defined by the current winter policy. The policy states the times of day when the service will be provided, the priority system used in the treatment of roads & footways and the target times for completion of that treatment.
- 10.3. The overarching requirement of the policy is to comply with the Roads (Scotland) Act which requires the Council, as Roads Authority, to take such steps as they consider **reasonable** to prevent snow and ice endangering the safe passage of pedestrians and vehicles. It is important to recognise that the Council is required to reduce those risks, not alleviate them completely.
- 10.4. There are a number of changes recommended to the policy and those are discussed below.

11. Service Provision – Period of Operation

- 11.1. The policy defines the start and end dates of the winter service with the current winter period defined as 1 October until 30 April each year. Examination of treatment records over the last 7 years shows that the onset of winter is later in the year (mid-November) and it is now extremely rare for action to be called during the first 2 weeks of October. This is also true in the spring period were by late April temperatures have generally recovered to the point where treatment is a rarity.
- 11.2. This calls into question the need to provide a full service during those early/late days of the winter season. If Council were to reduce the official period of winter there would be potential savings through not having to procure weather forecasts, polling of weather stations (icelert) and overtime payments for duty officers. It is calculated that potential savings would be in the order of £10k per year.
- 11.3. It is recommended that the defined winter period stated in the policy be changed to 14 October until 14 April each year.

12. Service Provision – Secondary Roads

12.1. Highland's road network is 6,750km (4,200 miles) in length. In accordance with policy it is categorised into 3 priorities: primary (1st priority), secondary (2nd priority), and other.

- The primary road network (i.e. the roads which are treated first in the morning and also receive an evening pre-grit) total 2,160km (1,350miles) in length or approx 32% of the overall network.
- The secondary network accounts for 1,485km (928 miles or 22% of the overall network) with the third and lowest priority group (Others) the remaining 3,105km (1,940 miles).

Under ice and light snow conditions the treatment of the primary network is wholly achievable by the target time of 8:30am using existing resources

12.2. Secondary routes are predominately “school bus routes”. The target treatment time for secondary routes is 9am. It is clear that the treatment of these routes presents the Service with the single most onerous task during winter operations.

12.3. Secondary routes have a target completion time of 9am yet many schools start at 8:40am so even when policy is met the road may not be getting treated until after the bus has completed its journey to the school.

12.4. Another difficulty being presented to the service is that school bus operators are inclined to take the shortest route between pick up points. This will often involve the use of very minor low trafficked roads which, were it not for that one journey, would be classed as an “other” route (lowest category).

12.5. There are also examples where on remote parts of the network there are unrealistic expectations placed on the Service. There has to be an acceptance that reaching remote locations before the bus starts its journey is just not possible when geographic considerations are taken into account.

12.6. In consideration of these points and feedback received through Ward Business Meetings it is recommended:

- the term “school bus route” be removed from the policy document;
- to maximise safety the Council promotes a preferred route system for school transport vehicles. These routes would be categorised as secondary providing priority to roads with specific known difficulties such as prolonged gradients and/or high altitude;
- the prioritisation of roads within the Local Committee area be approved by the local committee, working within the constraints of resource available to it; and

- that future contracts for school transport services include the requirement that vehicles be fitted with all weather (mud and snow) tyres.

13. Service Provision – Operating Times

- 13.1. Highland Council does not operate a 24-hour winter service. Hours of operation are 6am to 9pm Monday to Saturday with a 7am start on a Sunday.
- 13.2. Consultation with Members through Ward Business Meetings indicated a strong desire to look at the possibility of operations starting slightly earlier, particularly during conditions of snow.
- 13.3. Benchmarking with other Councils shows that Highland along with Moray start their operations at 6am whereas Aberdeenshire start at 5:30am with Perth & Kinross and Argyll & Bute starting some of their operations at 5am.
- 13.4. An earlier start time would provide significant benefits to the service particularly in the larger towns and higher trafficked roads where the gritter would have the opportunity of treating roads in advance of commuter traffic as well as aiding service bus routes in the larger urban areas which start at 6am.
- 13.5. The major obstacles to this proposal are (a) Driver Hour Regulations and (b) costs.
 - (a) Driver Hour Regulations restrict drivers on domestic hour's rules to a maximum of 10 hrs driving per day. If drivers were to start 30 mins earlier then they would have to finish driving duties earlier by the same amount at the end of their shift. There would be a risk that during adverse weather (which continued throughout the day) there would be a reduced driver resource available mid-afternoon before the evening shift started.
 - (b) There would be cost implications. If all our morning routes were to start at 5:30am this could incur additional costs of approx £80,000 per annum (indicative as dependant on weather).
- 13.6. An alternative option would be to start a limited number of routes at 5am. These routes would treat only the busiest and most strategic roads within each Local Committee area during the first hour of operations. This would involve not more than 10% of the fleet resource. The relevant Duty Officer would have discretion on when to call these routes, if at all, and be based on specific hazards such as heavy icing or where snow was affecting high ground to the detriment of public/school transport.
- 13.7. The cost of implementing this extra service would be approx £11,000 per annum (indicative as dependant on weather). If Members were to accept a reduced winter period (item 11) then this additional service would be cost neutral.

14. Definition of a “Community”

- 14.1. Under the definition of what may be classed as a Secondary route the policy document makes reference to the term “Roads connecting smaller communities to the primary network”.
- 14.2. There is no guidance given in the policy as to what constitutes a ‘community’ and this has led to difficulties in categorising roads at a local level.
- 14.3. During consultation with members at Ward Business Meetings various suggestions were aired but there was no clear consensus on what would be an appropriate definition.
- 14.4. It is recommended that the word ‘community’ be left unchanged within the policy.

15. Conclusions

- 15.1. The benchmarking exercise has confirmed that Highland Council provides a winter service of a comparable standard to neighbouring Councils.
- 15.2. The provision of the winter service is being achieved for less money than other Councils but to a similar standard.
- 15.3. The fleet resource available to treat road and footways is comparable to that provided by other Councils.
- 15.4. The length of road targeted as our first priority for treatment is comparable to other Councils.
- 15.5. The Council needs to engage with other Councils to share procurement methods for employment of private contractors.
- 15.6. There is a need to consider changing operational boundaries to ensure a more consistent treatment is applied to arterial routes.
- 15.7. There is a need to invest in salt storage facilities.
- 15.8. There is a need to assess further deployment of salt bins in urban areas with particular emphasis on the mechanism for ensuring they are regularly replenished with salt.
- 15.9. There is an opportunity to reduce the defined period of winter and use the savings to permit an earlier start time for a limited number of core routes at neutral cost.
- 15.10. The prioritisation of secondary routes should be assessed on what is best for the local road network with the term ‘school bus route’ removed from the policy.

16. Implications

16.1 The resource and rural implications are detailed in the report.

16.2 There are no other known legal, equality, climate change/ carbon clever or risk implications arising from this report.

Recommendations

The Committee is invited to:

- note the outcomes from the benchmarking survey;
- note the operational changes at sections 5.6, 8.4 and 13.6 in the report;
- agree that future contracts for school transport services include the requirement that vehicles be fitted with all weather (mud and snow) tyres; and
- approve the updated winter policy (Appendix A) and in particular:
 - a change to the winter period within the policy from 14 October to 14 April each year; and
 - the removal of the term “school bus route” from the policy and to introduce a preferred route system for school transport vehicles.

Designation: Director of Community Services

Date: 15 April 2016

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The Highland Council

| ~~Transport, Environmental &~~ Community Services

| Winter ~~Maintenance Service~~ Policy

| April 2016 ~~September 2013~~

Winter ~~Maintenance~~Service Policy

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THE HIGHLAND COUNCIL

~~Transport, Environmental and~~ Community Services

Winter ~~Maintenance Service~~ Policy

1.0 BACKGROUND

- 1.1 Under Section 34 of the Roads (Scotland) Act 1984, a Roads Authority shall take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads.
- 1.2 This Winter Maintenance Policy relates to the Council's responsibilities as Roads Authority for adopted roads, cycle ways, footways and footpaths.
- 1.3 Cross Service Working arrangements exist between Services to ensure that Council properties receive an appropriate winter maintenance service. The appropriate Service Director will determine the appropriate level of winter maintenance service for footpaths, car parks and other areas that are the responsibility of the Council but are not on the list of public Roads.

2.0 GENERAL

- 2.1 With the operational management devolved to the Areas it is essential that a common Winter Maintenance Policy is in place to ensure a consistent service for drivers passing between local Areas.
- 2.2 It is the aim of Highland Council in respect of its winter maintenance service to:-
 - 2.2.1 Provide a winter gritting and snow clearing service which, as far as is reasonably practical, using the resources available, permits the safe movement of vehicles and pedestrians on the adopted road and footway network and seeks to minimise delays attributable to weather conditions.
 - 2.2.2 Conduct operations having regard to the requirements of the Health and Safety at Work Act 1974 and EU and Domestic Driver Hours Regulations.
- 2.3 The Council as Roads Authority is not responsible for Winter Maintenance on unadopted roads and will not provide a Winter Maintenance service for unadopted roads. It will however make every effort to provide assistance for emergency and medical services during severe weather conditions where there is an urgent need for safe access.
- 2.4 The responsibility for Winter Maintenance on Trunk Roads lies with Transport Scotland.
- 2.5 The Council will source Winter Weather Forecasting Services from recognised Meteorological Service Providers during the period ~~1st~~ 14th October to ~~30th~~ 14th April.

3.0 TREATMENT OF ROADS

The Council will endeavour to provide the highest level of service possible within the resource available. During winter, especially during severe weather, it may not be possible to keep every road free from ice and snow at all times.

The treatment of roads will be carried out based on a hierarchical system dependant on route priority. The time taken to complete the treatment of routes will vary from day to day depending on actual weather conditions and can be expected to increase significantly during periods of snow due to having to plough both sides of the road.

3.1 NETWORK HIERARCHY

The following prioritised hierarchy will be used to determine the order of treatment of roads.

PRIMARY (Highest)	Strategic, Regional, Sub Regional and Link roads which serve the larger communities and permit the majority of road users to travel across the region. Main & Local distributor roads in the larger urban settlements. High frequency service bus routes operating at least 6 days a week and starting prior to 7am with identified hazards.
SECONDARY	Roads connecting smaller communities to the primary network. Link and Service roads within the larger urban settlements. Service and school* bus routes not covered by the Primary network.
OTHER	Minor rural and local access roads. Residential roads in urban settlements.

Gritting may not be completed on all routes before buses start their journeys.

~~* Contracted school buses and/or mini buses (9 passenger seats or more)~~

The priority network will be agreed by Local Area Committee. Leaflets with maps showing the Primary and Secondary network will be made available via the Council web site at the start of each winter period.

3.2 TREATMENT TIMES - MONDAY TO SATURDAY

The service will be provided between 6am and 9pm. Treatment after 6pm will in general be restricted to Primary routes only.

3.3 TREATMENT TIMES – SUNDAYS AND PUBLIC HOLIDAYS

3.3.1 Sundays, 25th December and 1st January

The service will be provided between 7am and 9pm and will be restricted to the Primary network only. During periods of sustained snow, or where significant snow conditions are forecast, the service may be extended to include difficult Secondary routes.

3.3.2 26th December and 2nd January

The service will be provided between 7am and 9pm and treatment will be restricted to the Primary and Secondary networks only. Where December 26th and January 2nd fall on a Sunday then a Sunday service will be provided.

3.4 PRECAUTIONARY TREATMENT

Precautionary treatment carried out the previous evening, normally before 9pm, in advance of forecasted adverse weather, will in general be restricted to Primary routes only.

3.5 TREATMENT DURING SNOW CONDITIONS

In times of severe weather, resources will be concentrated on keeping the Primary network clear and as a result there may be a delay before it is possible to treat the Secondary and Other road network, including residential streets. In exceptional snow conditions external contractors will be deployed to assist with snow clearance.

3.6 SNOW GATES

For safety reasons Snow Gates are located on routes where drifting snow can make the route impassable very quickly. The closure and subsequent opening of snow gates will only take place with the authority of the Police.

The roads controlled by snow gates within the Highland area are as follows:

- A939 Bridge of Brown
- A939 Grantown to Dava
- A939 Dava to Ferness
- A832 Braemore to Dundonnell
- B9007 Carrbridge to Ferness
- B9176 Struie Hill Road
- Cairngorm Ski Road
- Bealach na Ba

In severe snow conditions the Council may withdraw resources from these roads and allow the storm to abate. In such circumstances resources may be diverted to assist snow clearing operations on other parts of the network. Additional resources may be employed during such snow conditions.

3.7 TARGET TREATMENT TIMES

The following are the target times for completion of routes during conditions of ice and light snow.

3.7.1 Monday to Saturday

PRIMARY ROUTES	8.30am.
SECONDARY ROUTES	9.00am.
OTHER	As resources and conditions permit.

3.7.2 Sundays, 25th / 26th December and 1st / 2nd January

PRIMARY ROUTES	9.30am.
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3.8 TREATMENT OF DIVERSION ROUTES.

Where a road, including a trunk road, is closed to traffic due to either planned works or an emergency situation then the agreed diversion route will be treated as follows.

Trunk Road Closure.

The agreed diversion route will be treated to Primary standard and signs erected at each end of the diversion and any other junctions with trunk roads, stating that there will be no overnight salting.

In an emergency situation and after Transport Scotland or its trunk road management and maintenance agents have notified the Council of the closure, every endeavour will be made to both treat the agreed diversion route appropriately and erect signs before the first overnight period.

Council Road Closure.

Any part of the agreed diversion route that is of a lower priority than the closed road will be treated to the same priority as the closed road.

4.0 TREATMENT OF FOOTWAYS, FOOTPATHS AND CYCLE WAYS.

Treatment for ice and light snow conditions on adopted footways, footpaths and cycle ways will be carried out as set out below. Each gritting route will take a significant length of time to complete. The length of time taken will vary from day to day depending on actual weather conditions.

4.1 NETWORK HIERARCHY

The following prioritised hierarchy will be used in determining the order of treatment of footways.

Priority	Description
PRIMARY	Main urban shopping centres. Primary cycleways.
SECONDARY	Footways serving main urban areas, schools, hospitals and minor shopping areas. Sheltered Housing and locations of special need with known identified hazards.
OTHER	Other footways as resources allow.

4.2 TREATMENT TIMES - MONDAY TO SATURDAY

The winter maintenance service will be provided between 6am and 6pm and routes will be treated on a priority basis as resources permit

4.3 TREATMENT TIMES - SUNDAYS AND PUBLIC HOLIDAYS

A service will be provided between 7am and Noon on Primary routes only.

There will be no service for footways on Christmas Day or New Years Day.

-- End of Policy Statement --