

**The Highland Council**

**Transport, Environmental and Community Services Committee  
16 May 2013**

Agenda Item	<b>8</b>
Report No	<b>TEC 41-13</b>

**Review of the Winter Maintenance Service**

**Report by Director of Transport, Environmental and Community Services**

**Summary**

This report updates Member on the review of the winter maintenance service and sets out proposals for enhancing the current level of service.

**1. Introduction**

- 1.1 This report updates Members on the outcome of the review of the winter maintenance service and sets out proposals for enhancing the current level of service.
- 1.2 The review took account of the work undertaken by the Cross Party Working Group set up in the last Council to review winter maintenance.

**2. Current Winter Maintenance Policy**

- 2.1 The Council's Winter Maintenance Policy, which sets out the priority system for treating the local road network, was last reviewed in 2003.
- 2.2 The local road network extends to 6,741km and it is not possible to treat every road at once, therefore the Policy sets out a Priority system for winter maintenance treatment which is detailed below:
  - Priority 1 Identified main routes
  - Priority 2 Other strategic routes including bus routes
  - Priority 3 Main urban streets and school bus routes (School bus routes are defined as buses or mini buses on contract to the Council)
  - Priority 4 All remaining routes, treated as resources permit
- 2.3 The policy covers the period 6 am to 9 pm, i.e. there is no overnight service, however we will respond to emergency situations if requested by the Police.
- 2.4 Priority 1 routes receive a precautionary evening treatment ahead of an adverse forecast, and are also treated on a Sunday, as determined by the weather conditions.

2.5 The length of road within each Priority is detailed below:

Priority 1	1,987km	(29%)
Priority 2	438km	(6%)
Priority 3	1,589km	(24%)
Priority 4	2,727km	(40%)

2.6 The target times for completing route in frost or light snow are:

Priority 1	8:30 am
Priority 2	9:00 am
Priority 3	9:00 am
Priority 4	High areas and known problem areas by 9:30

2.7 From the above it can be seen that, in conditions of frost and light snow, 4,014km of road (60% of the local network) will be treated by 9 am.

2.8 In more difficult conditions, heavy snow, extensive black ice, it will take longer to treat the network.

### **3. Current Level of Winter Maintenance Resources**

3.1 There are 114 front line winter maintenance vehicles and 42 footpath tractors available for deployment on a daily basis.

3.2 The length of each gritting route will vary depending on the nature of the route and the efficiency of the network (circular routes versus linear routes). The average route length, based on treating P1, P2 and P3 routes, is 35km.

3.3 The number of operatives employed is based on delivering the winter maintenance service, and there is very limited capacity to carry out other work when the operatives and vehicles are deployed on winter maintenance.

3.4 A weather forecast service is procured (by competitive tender) which provides a wide range of weather information to support the winter maintenance service.

3.5 The current weather forecast contract, which commenced in October 2012, provides route-based forecasts in place of the former area-wide forecast. This allows a more targeted approach to be taken to treating roads, especially in marginal conditions.

3.6 Six winter maintenance vehicles have been fitted with a tracking system on a trial basis. This allows managers to see where they are and how much salt is being spread.

3.7 A further benefit of vehicle tracking is that it provides a record of treatment times, which will assist in dealing with any third party claims relating to winter maintenance. It is also useful in identifying the closest vehicle to divert to an emergency.

3.8 Vehicle tracking helps to building up a picture of when the key points on the network are reached, allowing routes to be managed in such a way that, for example, treatment timings can be better integrated with school buses.

3.9 Vehicle tracking also provides an additional safety feature for drivers working alone in difficult conditions.

#### **4. Drivers Hours Regulations**

4.1 The Drivers Hours Regulations, which is a legal requirement, determines the total hours a driver can work during the day, the minimum length of break between shifts, and the weekly rest periods.

4.2 There is no scope to extent of the current winter maintenance service (6am to 9 pm) without breaking the Drivers Hours Regulations, and any change to the current hours of operation will require an increase in the number of drivers.

#### **5. Areas Identified for Review**

5.1 The following areas have been identified as the main issues in relation to the current winter maintenance policy / service.

1. Timing of treatment on school bus routes
2. Priority for “lifeline roads” serving remote communities
3. Improve level of Sunday Service
4. Community self-help / resilience
5. Spare vehicles
6. Use of external contractors
7. Treatment for Sheltered Housing
8. Ensuring grit bins are kept full

Each of the above was reviewed in detail and the outcomes are summarised below.

#### **6. Timing of Treatment on School Bus Routes (5 am start)**

6.1 School Bus routes are currently classed as Priority 3, although some will be contained with the Priority 1 & 2 Routes. Treatment of Priority 3 routes start at 6 am and the target time for completion, in frost or light snow, is 9 am.

6.2 To ensure the School Bus routes were completed ahead of the school transport, treatment would be required to begin on Priority 1, 2 & 3 routes at 5am. The Driver’s Hours Regulations, together with the number of drivers, determine the overall extent of the working day, and if a 5 am start was adopted, the service would have to terminate at 8pm, rather than the current time of 9pm.

6.3 While a “5am to 8pm” service has advantages in relation to school transport, it has disadvantages for travel during the evening period. An 8pm finish would

be detrimental for bus services, people visiting hospitals, and people travelling to or from work. It was therefore felt that a 9pm completion time should be retained.

- 6.4 As stated above, the Driver's Hours Regulation do not allow the "6am to 9pm" service to be extended, and if a 5am start is to be adopted, and a 9pm finish time retained, it would require additional drivers.
- 6.5 An analysis of school closures, due to transport difficulties attributable to winter road conditions, was undertaken across Ross, Skye and Lochaber in 2011, and was included in a report to the Transport, Environmental and Community Services Committee on 26 May 2011 (TEC-24-11). The extreme winter of 2010/11 resulted in an unprecedented number of school closures.
- 6.6 In 2010/11 the 40 schools in the Ross, Skye and Lochaber area lost a total of 86 days between them, an average of 2.1 days per school.
- 6.7 In winter 2012/13 only one of the same 40 schools had to close due to road conditions and that was for one day only.
- 6.8 In the Highlands as a whole, the 2012/13 winter resulted in three schools closing for one day and two schools closing for two days solely due to road conditions, a total of 7 lost days. In the same period there were a further 27 days of closures due to loss of power, heating or water failures, and roof damage.
- 6..9 It is estimated that 43 additional drivers would be required to introduce a 5am start time (and retain a 9pm completion time). Given the low number of school closures due to winter road conditions, the cost of introducing a 5am start time does not appear to be justified.

## **7. Priority for "Lifeline Roads" Serving Remote Communities**

- 7.1 This proposal examined the option to increase the Priority for "lifeline roads" serving remote communities from Priority 3 or 4 to Priority 1. This would increase the level of service to include a precautionary evening treatment in advance of ice or snow, and a Sunday service.
- 7.2 Defining the roads which could potentially fall into this category proved to be difficult, as most remote communities could argue that they relied on a "lifeline road".
- 7.3 To give some idea of the cost of implementing this option it was assumed that this would add 5% of the network (340km) to the length of existing Priority 1 routes. On that basis an additional 10 Drivers and 10 vehicles would be required.

## **8. Improve Level of Sunday Service**

- 8.1 This proposal would see the level of service currently provided on a Sunday,

improved to a similar level of service provide on a weekday.

- 8.2 Whilst this proposal would improve the Sunday service it would also provide benefits for the following Monday, as roads treated on the Sunday are likely to have some residual salt (depending on weather conditions) and this would help with the Monday treatment.
- 8.3 In order to comply with the Drivers Hours Regulations every additional route operated on a Sunday would require an additional driver to be employed. To complete all routes on a Sunday by 9am would require 70 additional drivers.
- 8.4 Even if the treatment completion time on Sundays was relaxed to afternoon (allowing one driver to complete two or even three routes) it would still require an additional 26 drivers.

## **9. Community Self-help / Resilience**

- 9.1 A scheme to assist communities to carry out winter treatment of footpaths was introduced during last winter, and it is proposed to expand the scheme over the next and future winters.
- 9.2 Community self-help would enable communities to provide an enhanced service over and above that which the Council provides.
- 9.3 Community help would consist of:
1. Provision of salt for them to spread on public roads and footpaths
  2. Provision of hand tools (shovels or manually operated spreaders) to facilitate spreading of salt
  3. Provision of protective clothing
  4. Public liability insurance for those taking part.
- 9.4 While there was limited take up last winter, it is proposed to engage with communities well before the start of next winter.

## **10. Spare Vehicles**

- 10.1 There are currently no spare vehicles within the overall winter maintenance fleet, and any breakdowns or accidents are covered by re-prioritising treatment routes, which leads to delays in treating routes.
- 10.2 For longer term breakdowns there is an option to hire in vehicles. However, due to the specialist nature of the vehicles this can take time to organise and routes will have to be re-prioritised until the spare vehicle arrives.
- 10.3 One additional vehicle per area (three in total) would provide back-up in the event of a breakdown or an accident. The option to hire in winter maintenance vehicles would still be available if required.

## **11. Use of External Contractors**

- 11.1 Contractors are already employed to provide the full winter maintenance service on three routes where the Council has no resources based in the area.
- 11..2 Local contractors and farmers are also employed through a framework agreement to provide resources to assist with clearing snow.
- 11.3 The arrangements for using local contractors are working well, although it was not used to any great extent during the past winter. That is one of the problems for local contractors. It is difficult to justify providing specialist equipment when they do not know the extent to which it will be used.

## **12. Treatment for Sheltered Housing**

- 12.1 TECS Committee (20/09/12) agreed that the priority given to sheltered housing developments would be reviewed.
- 12.2 Many sheltered housing sites contain footpaths maintained from the Housing Revenue Account.
- 12.3 There are existing arrangements in some areas for TECS to provide a winter maintenance service on HAPS paths but these arrangements are not comprehensive.
- 12.4 It is proposed to extend treatment to the main access paths in all Council sheltered housing schemes, thus improving the safety of some of our more vulnerable residents reducing the risk of slips and falls to those who are least able to deal with them.

## **13. Ensuring Grit Bins are Kept Full**

- 13.1 Concern has been expressed in relation to keeping grit bins replenished, and a new initiative has been introduced to help the public report empty grit bins. Stickers, giving the Service Centre telephone number, have been placed on the grit bins, and this allows the public to report empty bins if they occur between planned replenishment.

## **14. Additional Option – Reduce Number of Priorities from 4 to 3**

- 14.1 During the review it was considered that the 4 Priorities currently defined in the Winter Maintenance Policy could be reduced to 3. This would provide a simplified hierarchy and may permit more efficient routeing.
- 14.2 The present Priority 2 definition - "*other strategic routes including bus routes*" applies to only 438 Km (6%) of the network. The difference in treatment between the current Priority 1 and Priority 2 routes is that Priority 1 routes receive a precautionary treatment in the evenings, and a Sunday treatment.

- 14.3 Increasing the number of Priority 1 routes would increase the length of the network receiving evening pre-treatment and Sunday treatment, offering an enhanced level of safety overnight and making early morning treatment of these routes more effective.
- 14.4 It is proposed that a comprehensive review of routes is undertaken to identify those routes which should be re-classified as Priority 1. While the majority of the existing Priority 2 routes should be considered for re-classification to Priority 1, other difficult routes should also be considered. However the overall length of route to be reclassified as Priority 1 should be kept below the level which requires additional drivers or vehicles. This effectively maximises the use of our existing resources.
- 14.5 Sunday treatment to bus routes would only be provided when scheduled buses operate on a Sunday.

## 15. Cost Implications

- 15.1 The cost of implementing each of the areas identified for potential enhancement has been estimated on the basis of the requirements for additional resources (Labour, Vehicles and Salt), and the costs are summarised in the table below.

Options	Extra Drivers	Extra Vehicles	5 Month Cost (Nov-Mar)	7 Month Cost (Apr-Oct)	12 Month Cost
1. Changing the policy from 6am to 9pm to 5am to 9pm	43	0	£896k	£1,250k	£2,146k
2. Change Priority for 5% Lifeline Roads	10	10	£417k	£290k	£707k
3. Enhanced level of Sunday Service	26	0	£610	£760	£1,370
4. Community self-help	0	0	£50k	0	£50k
5. Spare Vehicles	0	3			£52.5k
6. Use of External Contractors	0	0	0	0	Included in current budget
7. Treatment for Sheltered Housing	0	0	0	0	Included in current budget
8. Ensuring grit bins are kept full	0	0	0	0	Included in current budget
9. Reduce Priorities from 4 to 3	0	0	£100k	£0	£100k

- 15.2 The table above details both the part-year and full year cost of introducing each proposal.
- 15.3 The increases in resources would be cumulative if more than one option is chosen, for example to introduce 5% lifeline roads *and* enhance the Sunday service would require 36 drivers.
- 15.4 Whilst additional resources to deliver winter maintenance are only required during the winter months, there is a high risk that suitably experienced and qualified drivers could not be recruited on a seasonal basis. Any additional vehicles purchased would of course be available all year whether they were required or not. Experience of hiring specialist winter maintenance vehicles over the winter period is that the cost is very high, and there is no real saving.
- 15.5 Even during the winter months the number of days on which snow and ice are present can vary considerably and work would have to be found for the additional workforce on the mild days as well, adding pressure to the road cyclic maintenance budget as well as the winter maintenance budget.

## **16. Conclusions**

- 16.1 The following conclusions can be drawn from the review:
1. The current policy has been successfully tested in the courts.
  2. A range of the enhancements identified during the review can be achieved without the need to increase the number of drivers.
  3. The Driver's Hours Regulations determine that any major changes to the level of service will require additional drivers and in some cases additional vehicles to be provided.
  4. Any proposal to enhance the service has to take into account the affordability of the proposals.



## 17. Recommended Enhancements to the Winter Maintenance Service

17.1 It is recommended that the following enhancements are made to the current winter maintenance service.

Option	Description	Cost
4.	Community Self-help / resilience	£50k
5.	Introduce 3 Spare Vehicles	£52.5k
6.	Use of External Contractors	Included in current budget
7.	Treatment for Sheltered Housing	Included in current budget
8.	Ensuring Grit Bins are kept full	Included in current budget
9.	Reduce Priorities from 4 to 3	£100k

## 18. Implications

18.1 The recommendation indicates an additional cost of £202,500. If the Committee is minded to support the recommendations then it is proposed, for 2013/14 only, that TEC Services explores options to contain this additional cost within the overall budget. Thereafter the budget will be reviewed as part of a Council wide review of all service budgets, pressures and commitments, leading to formal proposals being considered by Highland Council in February 2014.

In considering this proposal the Committee should also be mindful of the uncertainty over the Winter Maintenance budget, where the weather conditions will play a major part in actual expenditure. The financial risks associated with Winter are initially addressed within the TEC Service budget, however should this not be possible then the resourcing for winter will require to be addressed corporately.

18.2 Any revisions to the winter maintenance policy will require to be agreed with the Council's Insurers.

18.3 There are no equality implications arising directly from this report.

18.4 There are no climate change implications arising directly from this report.

18.5 There are no risk implications arising directly from this report.

## **19. Recommendations**

19.1 Members are invited to approve that the following enhancements are made to the current winter maintenance service:

- a) Engage with communities well before the start of next winter to promote the community self-help scheme.
- b) Provide 3 spare winter maintenance vehicles (one per Operational Area)
- c) Continue to use local contractors to provide additional resources to assist with snow clearing.
- d) Formalise the arrangements for the treatment of footpaths in sheltered housing schemes.
- e) Continue to ensure that Grit Bins are kept full
- f) Reduce the number of Priorities in the Winter Maintenance Policy from 4 to 3, and carry out a comprehensive review of routes to identify those routes which should be re-classified as Priority 1.

Note: While the majority of the existing Priority 2 routes should be considered for re-classification to Priority 1, other difficult routes should also be considered, however the overall length of route to be reclassified as Priority 1 should not exceed a level which requires additional drivers or vehicles.

19.2 Members are invited to approve that the Service explores options to contain the additional costs associated with Recommendation 19.1 within the overall TECS budget.

19.3 Members are invited to approve that the Winter Maintenance Policy is updated to take account of the changes set out in this report, and that the revised policy is taken to the TECS Committee in August for approval.

Designation: Director of Transport, Environmental and Community Services

Date: 2 May 2013

Report Author: Neil Gillies / Richard Guest

Background Papers: Highland Council's Winter Maintenance Policy