#### **SURREY COUNTY COUNCIL**

**CABINET** 

DATE: 18 JULY 2017

REPORT OF: MR COLIN KEMP, CABINET MEMBER FOR HIGHWAYS

LEAD TREVOR PUGH, DIRECTOR, ENVIRONMENT AND

OFFICER: INFRASTRUCTURE

SUBJECT: WINTER SERVICE COST SAVINGS PROPOSALS

## **SUMMARY OF ISSUE:**

Winter Service is provided by Surrey County Council (SCC) to enable the residents of Surrey to carry out their everyday activities during periods of winter weather. Preventing icy roads and keeping priority roads and footways usable during snowy conditions contributes to the corporate goals by keeping residents safe as they travel about and maintaining the availability of key routes so residents have choices on travel. In addition the impact on the economy of severe weather is minimised.

In the Medium Term Financial Plan (MTFP) a reduction of £340,000 has been made to the Winter Service Budget. This saving could not be realised in 2016/17 and therefore one off compensating savings had to be made by reducing levels of service in other Highways and Transport areas. In 2017/18 there have been further budget reductions against other Highways & Transport activities, which has resulted in reductions to levels of service and significantly reduced the opportunity to continue to find compensating savings.

Surrey Highways officers and our contractor, Kier, have considered where savings could be made, primarily by changing ways of working, to ensure that as far as possible current levels of service are maintained. We have been able to identify efficiencies that reduce costs whilst still retaining our ability to meet our statutory responsibilities and provide a resilient winter service.

#### **RECOMMENDATIONS:**

It is recommended that Cabinet:

- 1. Approves the policy changes, policy amendment and savings recommendation summarised in paragraph 17.
- 2. Notes the Environment and Infrastructure Select Committee recommendations as detailed within paragraph 14.

## **REASON FOR RECOMMENDATIONS:**

To enable savings of £340,000 from the Winter Service Budget identified in the Medium Term Financial Plan to be realised.

## **DETAILS:**

## **Background**

- 1. In 2016/17 the Winter Service Budget was reduced by £340,000. Options to make savings were presented to the Economic Prosperity, Environment and Highways Board in September 2016.
- The savings options presented to EPEH Board included reducing the length of network gritted, not filling grit bins and reducing the number of mini gritters available to salt hard to access areas. None of these options were endorsed by the EPEH board, however the Board were supportive of an option regarding reoptimisation of gritting routes.
- 3. The Highways and Transport Service took the decision to fund the savings in 2016/17 through one off reductions to the levels of activity in other Highways and Transport areas while working on revised options to make savings to the cost of the Winter Service for implementation in 2017 onwards.
- 4. This report aims to summarise savings recommendations which are presented as either;
  - a. a policy change
  - b. a short term policy amendment or
  - c. a savings recommendation which does not require a change in policy
- 5. The recommendations were endorsed by the Environment & Transport Select Committee at their meeting on 3<sup>rd</sup> July 2017. See paragraph 14 for Select Committee recommendation.

## Policy changes that will deliver Winter Service cost savings in 2017/18

6. The policy changes recommended to make annual savings from 2017-18 onwards are a change in approach to winter season length, the reduction of one mini-gritter vehicle from the fleet and a review of the maintenance of farmers snow ploughs.

Policy change 1:	Reduce season length to 26 weeks (from 29 weeks currently)
Details:	Surrey currently has a salting response on standby for the entire length of the Winter Service season. This means that vehicles are on hire and crews are paid standby for 29 weeks from the first Friday in October until the last Friday in April each year. Flexibility exists in the contract to reduce the vehicle hire period to 26 weeks, while still being able to hire the vehicles earlier if forecast data indicates it is necessary.
	Where supported by forecast data that indicated colder weather is unlikely, the decision would be made to start the standby operation later, or to end the season earlier. Kier have confirmed that the savings passed on to Surrey would be £46,000 per week (up to a total of 3 weeks or £138,000).
	A review of winter standby times used by authorities across the country has been carried out which indicates that Surrey have a longer standby

	Start Date	End Date	Weeks on standby
Surrey County Council	1st wk Oct	End April	29
Knowsley Council	1st wk Nov	End March	21
Herefordshire Council	3rd wk Oct	3rd wk April	26
Pontypridd Council	3rd wk Oct	3rd wk April	26
East Sussex	1st wk Oct	End April	29
Perth & Kinross	Mid Nov	End March	19*
Norfolk	3rd wk Oct	3rd wk April	26
West Sussex	1st wk Oct	End April	29**
Bristol City Council	1st wk Nov	End March	21**
Hampshire County Council 1st wk Oct End April 29			
* Full cover for 19 weeks with part  **drivers are on standby from Nov October and April		•	•

This policy change would not provide a definite budget reduction each year but rather a cost variation of £0 to up to £138,000 depending on the climatic conditions.

we cover 'colder routes' for the early part and later part of the season, with full coverage for the main part of the season. This decision would also be supported by forecast data and therefore could change annually

To give an indication of confidence in this saving a review of treatment data from the last 6 seasons has shown that the earliest treatment was 26th October 2012. Otherwise the first treatment has always been in November. This gives high confidence in a late season start being likely most years.

# Cost reduction value:

£0 to up to £138,000

as required.

High confidence in the upper value based on trends from past 6 years.

Policy change	Discontinue hire of one mini-gritter vehicle
2:	
	(Presented to EPEH in 2016 and was not supported)
Details:	In 2011 the winter policy was changed to include two mini gritters in the fleet. This was in response to the preceding severe winters and provided smaller vehicles that could help treat roads leading to remote communities and streets with access restrictions.
	At present only one vehicle is required to enable treatment of routes with access restrictions.
Cost reduction	£16,000

value:	

Policy change 3:	Review of plough maintenance to farmers  (Revised recommendation to the one presented to EPEH in 2016 which was not supported)
Details:	52 farmers and contractors provide standby ploughing capabilities throughout the winter on a call off basis. SCC provides some of the farmers with ploughs (currently there are 31 SCC owned ploughs used by 21 farmers), and pay to assess and maintain the ploughs each summer ahead of the winter season.  In the summer of 2016 all farmers with Surrey owned ploughs were visited to have their equipment assessed, however only 9 ploughs required maintenance.
	Going forwards, we recommend that all farmers are contacted during the summer and asked whether their ploughs require maintenance. Based on the historic number of ploughs that require annual maintenance we anticipate that we can reduce the spend in this area by approximately 80% without reducing the level of service.
Cost reduction value:	£4,000

## Compensating savings deliverable in 2017/18 (one time only)

7. The policy changes detailed above will not enable us to make the required £340,000 savings in the cost of the Winter Service in 2017/18 therefore the following compensating savings have been identified.

Policy Amendment	Do not survey any non-member funded grit bins
1:	(Revised recommendation to the one presented to EPEH in 2016 which was not supported)
Details:	The cost of surveying and automatically re-filling grit bits is approximately £40,000 per annum. It is proposed that the surveying of grit bins does not take place in 2017/18 with the exception of the 111 grit bins which members have funded.
	As the winter of 2016/17 was reasonably mild, it is fair to assume that most grit bins will still have a reasonable level of grit in them. The provision of grit bins is considered a discretionary rather than statutory element of Winter Service provision. If the winter of 2017/18 is more severe than average then grit bin filling will be reviewed. In addition, any requests for grit bin repairs or filling that are made via the website, contact centre etc will be reviewed.
	This item was presented to EPEH board in 2016 as an option to permanently reduce provision of grit bins. This proposal is to reduce the level of service provided by grit bins for one year only in order to provide compensating savings to the Winter Service budget.

Cost	£37,500
reduction	
value:	

Saving	Identify other budgets from where the savings can be made for 2017-
recommendat	18 only
ion 1:	

8. Recent mild winters have created an underspend of £110,000 held within the service budget that can be allocated within 2017/18. The additional £34,500 needed (assuming all recommendations identified in this report are approved) will be found by reducing activities in other Highways and Transport functions.

## Policy changes that will help deliver Winter Service cost savings in 2018/19

- 9. The salting route operation accounts for 72% of the Winter Service budget, with the cost of salt accounting for a further 12% of the budget. The total operating cost of each salting vehicle is approximately £48,000 per year. Surrey currently uses 39 salting vehicles at a total cost of approximately £1,870,000 per year.
- 10. Reducing the number of salting vehicles required to treat the network would provide a favourable cost reduction opportunity. By increasing the length of network each vehicle is able to treat it would enable a similar level of service to be provided for at a reduced cost.
- 11. The depot strategy (Cabinet Report title 'Highway winter maintenance depot and salt barn replacement programme' that can be found at;

  <a href="https://mycouncil.surreycc.gov.uk/ieListDocuments.aspx?Cld=120&Mld=4587&Ver=4">https://mycouncil.surreycc.gov.uk/ieListDocuments.aspx?Cld=120&Mld=4587&Ver=4</a>) currently being delivered will enable a reduction to the length of "un-treated distance" each salting vehicle covers and a consequent increase in the length of road each vehicle can treat during each run. The reduction in un-treated distance will be achieved by introducing new depots in Beare Green and Chertsey, meaning salting vehicles can be more evenly distributed across the county, reducing necessary travel time before starting to spread salt. Ahead of the 2018-19 winter season the salting routes will be re-optimised for the whole county. Re-optimisation means that all treated roads will be put into the fewest number of routes possible.
- 12. Policy changes 4 and 5 will enable more efficient routes to be created during the reoptimisation process and will increase the likelihood of fewer vehicles being required. It is vital that a decision is made on these recommendations before the reoptimisation commences to ensure the most efficient routes are created.

Policy change 4:	Increase of treatment time from 2hr 30m to 3 hrs
Details:	Surrey's policy is to treat each route within 2hr 30min from start to completion of last treated section. Benchmarking has identified that a 3 hour treatment window is used by many local authorities. Surrey are currently providing an enhanced service by having a policy of treating the network within 2.5 hours. An increased treatment window would contribute to the aim of reducing the number of salting vehicles required to treat the salting network.  Increasing the length of time a vehicle has to treat a route by 20% will

	mean routes can be around 15% longer. Assuming the same level of route efficiency could be achieved, this means we could carry out salting of the current routes with 3 fewer vehicles.
Cost reduction value:	£144,000
	The above cost reduction is an estimate based on reducing the number of salting vehicles required from 39 to 36. Each vehicle costs approximately £48,000.
	The exact number of vehicles that can be reduced may be greater or fewer, which will be clear once the optimisation project is underway – see policy change 5 for detail.

## **Policy** Enable the choice of salting treatment used on the network to be change 5: determined by the Highways & Transport Service based on national best practice Details: The Winter Service policy currently specifies the type of treatment that will be used. This policy change recommendation will enable the Highways & Transport Service to be empowered to use alternative suitable treatments without requiring a policy change. This will allow flexibility to utilise advances in treatment technology and more easily realise their benefits. An example of an alternative treatment (Thawrox+) and its benefits to Surrey is outlined below. The current treatment type used across all routes is pre-wet rock salt. That is rock salt that is pre-wet with a saline or brine solution produced by diluting marine salt with water in saturators at each depot. An alternative treatment is Thawrox+ which has anti-icing and de-icing properties as well as providing environmental benefits for both vehicles and highway infrastructure. Examples of benefits include; reduced corrosiveness of the salt means less corrosion to highway infrastructure such as street lights and road signs Increased adhesion to the road surface for a longer period of time means the "freeze/thaw" effect which damages roads is reduced. Thawrox+ is a treated salt which means that it does not have to be prewet with saline or brine. This means that it takes up a smaller volume of space in the vehicle to treat the same amount of road, so a longer length of road can be treated by the same size of vehicle. The use of treated salt is supported in Appendix H of the Code of Practice for Highway Maintenance Management. A further benefit of moving away from pre-wet salt is removing the need for saturators at each of the depots to produce the brine. Further to this marine salt would no longer be needed to produce the brine at a cost of about £20,000 per year. Moving to Thawrox+ would cost 7% more in salt usage per year. In 2015-16 this equates to £18,000. While there are cost and maintenance reductions of moving to the treated salt, the key benefit is not a direct

	financial saving, but rather enabling each salting vehicle to treat a longer length of carriageway with each load, maximising their ability to treat for a 3 hr period.
	The combination of an increased treatment time and increased vehicle capacity (due to decreased spread rate of Thawrox +) would lead to each vehicle being able to treat a longer length of network.
Cost reduction	£0
value	
	This policy change would facilitate longer route lengths, and a subsequent reduction of vehicles. However the cost savings are taken into account in the treatment time cost savings in policy 4 above.
	While there are no direct cost savings in terms of Winter Service, removal of the need for saturators would generate a saving in the winter maintenance depot and salt barn replacement programme. Property colleagues have advised that the cost of refurbishing each of the existing saturators would be in excess of £23,000 with the cost of installing new saturators being considerably more.
	Saturators being considerably more.

# Non-Policy changes that will help deliver Winter Service cost savings in 2018/19

Saving recommendation 2:	Discontinue Kaarbontech grit bin management software
Details:	Kaarbontech software is used to manage grit bin inventory information and survey. It is anticipated that the Highways Asset Planning Team will be able to deliver an in house solution to replace this system by 2018/19.
Cost reduction value:	£6,000

Saving recommendation 3:	Reassess lengths of network against the criteria in consultation with Local Committees
Details:	Over 200km of our 1900km gritting network does not meet the criteria for gritting routes and this will be reviewed with the area hightway managers and local committees with a view to making changes.
Cost reduction value:	£48,000
	This is the reduction that could be made if it was agreed approximately 54km should not form part of the gritting network

## **CONSULTATION:**

13. The recommendations in this report have been developed by Members, Officers and Kier representatives. The Winter Performance Task Group met in 2016 to discuss

- recommendations prior to the 8<sup>th</sup> September EPEH Board and discussions were had with the remaining member of the Winter Performance Task Group following the creation of the Environment and Infrastructure Select Committee.
- 14. The recommendations were reviewed by the Environment and Infrastructure Select Committee on 3 July 2017 and their recommendation to cabinet is;
  - "The Environment & Infrastructure Select Committee endorse the report recommendations, subject to the following amendments to Policy Amendment 1 and Saving Recommendation 3,
  - 1. Policy Amendment 1 to be amended to read: 'Do not survey any non-member funded grit bins',
  - 2. Saving Recommendation 3 to be amended to read: 'Reassess lengths of network against the criteria in consultation with Local Committees'."

## **RISK MANAGEMENT AND IMPLICATIONS:**

- 15. Risks have been managed through the prioritisation of both roads and footways to provide clear understanding of agreed criteria for each category and the type of response/treatment proposed, taking into account agreed stakeholder views alongside operational requirements which form part of the annual review of the service.
- 16. Proposals for changes to policy do not result in changes to levels of service other than in the proposal to increase treatment time from 2 hours 30 minutes to 3 hours. This proposal is in line with policy in other authorities.

## **Financial and Value for Money Implications**

17. Summary of savings in context of requirement to save £340,000:

Summary of savings	Policy change	2017/18 £000	2018/19 and ongoing £000
Reduction in season length	Υ	138	138
Discontinue hire of one mini-gritter	Y	16	16
Review maintenance of farmers ploughs	Y	4	4
Increase treatment time from 2hrs 30 to 3 hrs	Υ		144
Enable Highways & Transport to determine suitable treatment type	Y		0
Do not survey non member funded grit bins (policy change for one year only)	Y	38	
Discontinue use of Kaarbontech software	N		6
Utilise operational reserves and reduce activities in other H&T areas	N	144	

Reassess lengths of network against the criteria in consultation with Local Committees	N		48
Total		340	356

## **Section 151 Officer Commentary**

- 18. The County Council is facing a very serious financial situation, whereby there are still substantial actions to be identified and delivered to achieve a balanced budget in the current year and a sustainable budget plan for future years.
- 19. The Section 151 Officer can confirm that the measures outlined in this report are expected to enable the Council to meet the winter service savings requirement set out in the 2016/17 Medium Term Financial Plan. The exact level of saving will be dependent on a number of factors including the length of the winter season.

## **Legal Implications – Monitoring Officer**

20. Section 41(1A) of the Highways Act 1980 states that a highway authority are under a duty to ensure, so far as reasonably practicable, that safe passage along a highway is not endangered by snow or ice. The words of qualification 'so far as reasonably practicable' mean that this is not an absolute duty, but it is governed by reasonable practicality and is specifically aimed at ensuring safe passage. The proposed measures are designed to meet this statutory duty.

## **Equalities and Diversity**

- 21. The winter service priority is, as far as is reasonably practicable, to safeguard the movement and well-being of all Highway users, both the residents of Surrey and those passing through the County.
- 22. The needs of all highway users, including those that are vulnerable are considered when making decisions on service provision however we are not able to treat the entire network at any one time. The impact of the service will be both positive and negative on all groups identified depending on their location in relation to the priority network.
- 23. To improve access the prioritisation process has been developed with particular reference to facilities such as schools, stations, hospitals, special schools and access to isolated communities. The policy has been further developed, through these enhanced criteria, to allow an increase on the priority salting network.
- 24. Support and access for vulnerable people is addressed and organised through Emergency Planning and local 4x4 groups etc. The Districts and Boroughs also provide a service to their own care home facilities which is outside the scope of the highway winter service.
- 25. The recommendations in this report will have no material impact on existing equality policy and therefore a full equalities assessment was not deemed necessary.

## **WHAT HAPPENS NEXT:**

26. Following this report officers will work with Kier to implement the approved recommendations.

27. Local Committees will be consulted during Autumn/Winter 2017/18 to reassess lengths of network against criteria with a view to making any agreed changes to routes prior to the winter of 2018/19.

#### **Contact Officer:**

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#### Consulted:

Environment and Infrastructure Select Committee
Jason Russell, Assistant Director Environment & Infrastructure
Lucy Monie, Head of Highways and Transport Service
Richard Bolton, Group Manager: Local Highway Services
Tony Orzieri, Finance Manager
Nancy El-Shatoury, Principal Lawyer
Daniel Squibb, Asset Planning Team Manager
Kristian Fields, Winter Operations Manager, Kier

## Sources/background papers:

- Well Maintained Highways, 2013: Code of Practice for Highway Maintenance Management
- Cabinet Report "Highway winter maintenance depot and salt barn replacement programme", 26/04/16
- EPEH Board Report "Winter Cost Saving Recommendations", 08/09/16
- E&I Select Committee Report "Proposed Winter Service policy changes required to realise cost savings" 03/07/17