

ABERDEEN CITY COUNCIL

COMMITTEE	Operational Delivery Committee
DATE	29 May 2018
REPORT TITLE	Roads Winter Maintenance Operations 2017 - 18
REPORT NUMBER	OPE.18.029
DIRECTOR	Rob Polkinghorne – Chief Operating Officer.
CHIEF OFFICER	Mark Reilly
REPORT AUTHOR	Angus Maciver
TERMS OF REFERENCE	1,3,5

1. PURPOSE OF REPORT

This report is intended to provide Members with an overview of the strategy that the roads operations operated throughout the city during the winter of 2017/18.

The report also highlights opportunities to develop the service and risks that face the winter service in the next 24 months. The report also requests authorisation to incur additional expenditure to develop areas of the service.

2. RECOMMENDATION(S)

That the Committee:-

- 2.1.1 Note there was an additional expenditure of £149,000 on de-icing salt to ensure the city council could respond to the extreme winter weather conditions in 2017/18;
- 2.1.2 Instruct officers to examine the possible benefits and savings achievable through route optimization and automated gritting;
- 2.1.3 Instructs that the Chief Officer Digital & Technology explores available options for vehicle location and history technologies as part of the 'Being Digital Strategy' and presents any recommendations to committee before winter 2018.
- 2.1.4 Instruct Operations officers to continue with the comparison of similar urban authority's winter services both in terms of operation and cost;
- 2.1.5 Instruct officers to incorporate where appropriate, within the Winter Services Plan for 2018-2019, those recommendations in relevant documents such as "Well Managed Highway Infrastructure" and other relevant documents such as

the SCOTS Winter Service Subgroup advice not already included in the Winter Service Plan 2017-2018

- 2.1.6 Instruct officers to examine the implications of the anticipated additional maintenance burden for the winter maintenance provision from the de-trunking of sections of the A90/A96 following completion of the Aberdeen Western Peripheral Road and to reduce the cost implications of this were possible
- 2.1.7 Instruct the Chief Officer for Operations to invest £40,000 from the winter maintenance budget in the purchase and maintenance of up to 20 large grit bins to be located in communal areas across the city in preparation for the 2018/19 winter period.
- 2.1.8 Instructs the Chief Officer for Operations to review the footway treatment regime, reporting back to committee as part of the 2018/19 Roads Winter Operational Plan.

3. BACKGROUND

3.1 Winter Weather Pattern and Service Delivered

The start of Winter Maintenance operations for 2017-18 was again held back in order to achieve part of the previous approved budget savings. Commenced with early morning operations on 13 November. Treatment was undertaken on 97 days this winter. The prolonged winter weather resulted in multiple treatments being required on the majority of these days.

Number of treatments carried out during the 97 nights/days requiring treatment.				
Month	Pre-salts	Overnight operations	Early Morning operations	Snow/Ice/Frost operations
Oct 17		1	1	1
Nov 17	12	10	17	21
Dec 17	11	15	18	18
Jan 18	5	5	19	20
Feb 18	5	8	18	20
Mar 18	4	11	14	17

Analysis of the salt returns provided by each city council indicates that Aberdeen City was required to carry out more treatments than the other three major cities, confirming that the winter in Aberdeen was more prolonged than other cities in the south of Scotland.

On 109 nights during the winter saw temperatures at or below freezing. The lowest temperatures recorded by the sensors around Aberdeen were -8.8 °C road surface temperature and an air temperature of -9.5 °C both on 09/12/2017.

3.2 Basic Winter Rota Operations

Early morning operations	<u>Commenced</u>	<u>Finished</u>
Stand-by Operations	13/11/2017	1/04/2018
1/04/2018	13/11/2017	

Response operatives and the night attendant were in attendance throughout the year to carry out operations when required.

This basic operating system for staff was carried out throughout the winter period but was added to when a forecast of snow or severe ice conditions was received.

3.3 Footpath & Cycle Path Operations

The priority footpaths, as set out in the Winter Services Plan, were the only routes to be covered as part of the early morning operations. This change in operations was approved by the Policy and Strategy Committee in 2008. A review of the footway prioritization and treatment regime may now be appropriate.

Footpath operations were given additional support from Environmental Services when necessary. These operatives carried out hand spreading to some footpaths. With over 1200km of footways it was not feasible to have widespread coverage as anticipated by some members of the public. With a further 480 km of remote paths and areas within our Council housing estates requiring treatment the widespread expectation of “black” footpaths and car parks is not achievable in the worst winter conditions

This winter brine and de-icing chemicals were trialed a number of times at locations in the city centre and on cycleways. The benefits including the elimination of the spread of salt into shops and private properties. The treatment also remained effective for longer than standard salt. It would be proposed to continue to use this treatment at suitable locations.

3.4 Grit Bins

Grit bins were filled prior to the start of the winter season and maintained throughout the period. The policy for a number of years has been not to add further grit bins to the network.

It is proposed to trial at locations throughout the city up to 20 large capacity grit bins that can be quickly filled from a small truck; these should allow the public easier access to salt during storm condition, promote self-help and meet the community demand for more avenues to access salt.

It is proposed to allow an expenditure of up to £40,000 from the winter maintenance budget to purchase fill and replenish these for next winter. These large bins can be quickly filled from a lorry, this is particularly beneficial when there are competing demands on the frontline staff. Additionally, they should reduce the public concerns regarding delays in filling standard grit bins during storm conditions.

3.5 1 Tonne Salt Bags

This scheme allows community groups to request a 1 Tonne bag of salt for self-help as an alternative to grit bins. A total of 93 valid requests were received before the 1 December and issued by early December at a cost of approx. £150 each.

By early December there was an unprecedented demand for salt bags with the total number of applications received being 717. The vast majority of these were after the onset of the winter weather and made filling and deliver of such a large number impossible due to the limited staff resource being involved in winter duties.

3.6 Salt

A total of 15,321 tonnes of rock salt was used on the Aberdeen City Roads network during the financial year. This is in comparison to 4602T in 2016/7, 7,763 T in 2015/6, 9,483 T in 2014/5.

3.7 Future Developments

As the Aberdeen Western Peripheral Road nears completion it is anticipated that a considerable length of the current trunk road network, within the city boundary, will be de-trunked. The maintenance, including winter maintenance, of these de-trunked sections is expected to be transferred to the city council on the 1st April 2019.

The continuation of the current level of winter maintenance service along these sections would result in a significant additional burden on the Roads Operations budgets. The current cost of winter maintenance to trunk road standard on these roads is in the order of £250,000 per year. The anticipated annual cost of maintaining these roads to Aberdeen City Priority 1 standard is estimated to be in the order of £155,000-£200,000.

To mitigate against the additional burden from the de-trunked roads it is proposed that the ongoing works on route optimisation should be continued and extended to include the possibility of automated gritting. Significant savings have been reported by other cities that have adopting this approach.

It is proposed to review the current operational plan taking into account developments in the national standards such as “Well Managed Highway infrastructure” and the Society of Chief Officers of Transportation in Scotland (SCOTS), Winter Service Subgroup guidance on the consistent approach to implementation in Scotland.

Vehicle location and history systems are available that provides live gritter location information that can be accessed by both the service and the public. It is proposed to fit vehicles with the equipment required to introduce this system.

The available options to progress this are to be explored by the Chief Officer Digital & Technology as part of the ‘Being Digital Strategy’ who will present any recommendations to committee.

4. FINANCIAL IMPLICATIONS

4.1 Members will be aware that the Council Revenue Budget for 2017/18 for winter maintenance was £1.727M, The final expenditure was £2.333M, therefore £0.606 M above the budget allocation, and underlines the severity of the weather during this winter.

These additional costs are largely attributable to the increased number of treatments undertaken resulting in an additional 10,719 tonnes of salt being used. This resulted in an increased expenditure of £375,000 on salt in comparison to 2016/17.

It should be noted that the expenditure for the previous three winters has been £1.260M in 2016-2017, £1.752M in 2015-2016 and £1.977M and in 2014-15. The expenditure this winter has been higher than the long term trend.

The total expenditure on salt this financial year has been in the order of £649,000.

5. LEGAL IMPLICATIONS

5.1 Failure to provide a robust and justifiable “Roads Winter Service Plan” will leave the council more vulnerable to legal challenges and 3rd party insurance claims.

5.2 The Council is obligated under Section 34 of the Roads (Scotland) Act 1984 to take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over a public road.

6. MANAGEMENT OF RISK

To ensure that the service meets its obligation in the coming years the risks identified in the Future Developments section of the report need to be addressed:

Risk Reputational/Technological/ Customer /citizen	Risk Level	Mitigation/Controls
The development of new codes of practice superseding the current winter policies.	Medium	Monitor and consult on industry developments and adapt the Winter Service Plan to meet developing standards and practices.
Variable numbers of Community Salt Bags depending on the prevailing weather.	Medium	Use Corporate Communications to continue to highlight the importance of the community salt but to set a cutoff date after which

		provision cannot be guaranteed.
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Risk	Risk Level	Mitigation/Controls
Reputational and Financial		
The additional burden placed on the winter service from the de-trunking of sections of the A90/A96 following the completion of the Aberdeen Western Peripheral Route.	High	Ensure that resources are made available to identify the likely additional demands from the de-trunking of sections of the A90/A96 and to integrate the de-trunked sections of road into Winter Service Plan.
Allocated Budget will only cover costs of a standard winter, overspend at times of high snowfall will require the allocation of additional budget	High	Look at methods of introducing overtime winter operations into the mainstream work practices.

7. OUTCOMES

Local Outcome Improvement Plan Themes	
	Impact of Report
Prosperous Economy	The provision of an effective winter maintenance service that keeps the transport network working effectively is import to support the economy of Aberdeen during adverse winter conditions.
Prosperous People	With a growing population and expanding roads network it is important that the winter service plan is reviewed and adjusted to meet the ongoing demands of the population. The winter service plan seeks to have a positive impact on the public in general including those with protected characteristics by reducing the adverse effects of winter weather.
Prosperous Place	The Council is committed to providing a winter maintenance service that will help to enhance Aberdeen as a place to invest, live and visit. An

	effective winter maintenance service will also make the city safer for all road and transport users.
Enabling Technology	The Council is committed to examining technological and innovative methods to solve winter maintenance problems and to communicate with the public regarding ongoing treatments.

Design Principles of Target Operating Model	
	Impact of Report
Customer Service Design	The proposed enhancements to the winter service outlined in section 3.7 Future developments are beneficial to the customer engagement and needs.
Organisational Design	The use of self-help principal is a move away from being a provider to the customer to facilitating engagement with the customer.
Governance	This report seeks to comply with the Governance Principles set out in the Target Operating Model.
Workforce	This report seeks to comply with the Workforce Principles set out in the Target Operating Model.
Process Design	This report seeks to adopt appropriate national standards to help comply with the Processes Principles set out in the Target Operating Model.
Technology	The proposed future developments seek to use technology to embrace new ways of undertaking the works and drive savings and additionally keeping the customer informed.
Partnerships and Alliances	The winter service seeks to use joint working across and outwith the organisation to deliver the service.

8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	Full EHRIA included.
Privacy Impact Assessment	Not Required.
Duty of Due Regard / Fairer Scotland Duty	Not applicable.

9. BACKGROUND PAPERS

<http://councilcommittees.acc.gov.uk/documents/s75671/CHI.17.253%20Roads%20Winter%20Service%20Plan%202017-18.pdf>

10. APPENDICES (if applicable)

11. REPORT AUTHOR CONTACT DETAILS

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