

EAST AYRSHIRE COUNCIL

DEVELOPMENT SERVICES COMMITTEE – 29 JUNE 2004

REVIEW OF ROADS OPERATIONS AND WINTER MAINTENANCE – 2003/2004

Report By Executive Director of Development and Property Services

1. PURPOSE OF REPORT

1.1 To advise the Committee:-

- i) on the performance of the 2003/2004 Winter Maintenance operations
- ii) improvements scheduled for next season
- iii) savings arising from these and a reduction in footway patching

2. BACKGROUND

2.1 The winter maintenance general procedures and treatment priorities were approved by the Committee on 5 September 1996.

2.2 At the end of each winter a full review of the effectiveness of the service is carried out and any issues taken into account in the pre-season planning for the next winter.

2.3 Costs in winter maintenance have been reduced over recent years due to:

- More efficient spreading by gritters
- Better forecasting/decision making
- Installation of salt domes
- Single manning of gritters during routine operations
- Introduction of new unibody tipper/gritters

3. SUMMARY OF OPERATIONS

3.1	Total number of days with snow or ice conditions	=	94 days
	Total number of occasions when gritting crews were Called out for pre-grit/dawn patrol	=	173
	Number of occasions when overnight patrols required	=	27
	Tonnage of salt used	=	7,485 tonnes
	Total costs (including labour, plant and salt)	=	£1,082,331
	Number of written complaints received (1 Jan – 31 March)	=	8
	Number of insurance claims received	=	6

- 3.2 2003/2004 was a generally quiet winter with periods of settled weather. Due to temperatures being below zero for prolonged periods, a high level of call outs were recorded. Due to there being no prolonged snow cover and roads often being dry with only seepage areas requiring treatment, there was a marked reduction in the quantity of salt used, compared to the average:

Salt Usage

2000/01	2001/02	2002/03	2003/04	4 Year Average
12,538	8285	9115	7,485	9,356

- 3.3 Snowfall was confined mostly to the high ground.
- The main event was on Saturday 31 January 2004, when a fall of up to 10cm at all levels disrupted traffic, unusually more severe in the North of East Ayrshire.
 - Crews work continuously to keep roads clear of snow. Milder weather soon set in, with lying snow clearing by the following day.
- 3.4 Footway gritters and backup labour were deployed in accordance with agreed policy on only one occasion throughout the winter, to deal with a snowfall after surfaces had frozen during the evening of 27 December 2003.

4. ACTIONS FROM PREVIOUS REVIEW

- 4.1 One of the four footway gritters was hauled by a small tractor supplied by a private contractor, since the council owned tractor previously used is no longer available. This arrangement worked well.
- 4.2 The order has been placed for a weighbridge at Underwood Depot and the upgrading of the existing equipment at Gauchalland Depot (agreed by Committee on 10 March 2004). This will be installed prior to commencement of the next winter season.
- 4.3 Two new weather stations have been installed, as previously agreed by Committee on 22 October 2002.
- 4.4 The Web Page previously approved by Committee on 22 October 2002 was successfully set up during the winter and assisted the decision making progress.

5. ACTIONS FOLLOWING WINTER MAINTENANCE REVIEW

- 5.1 Inclusion of winter maintenance within the Scope of our Quality Assurance System. This will require a review of documentation.
- 5.2 The Committee is advised that a new weather forecasting contract has been entered into with PA Weather Services. The contract was drawn up by a consortium of councils in the South West of Scotland led by South Lanarkshire. The contract came into force on 16 May 2004 and will be in operation for a period of 5 years, with the option of a 2 year extension.

5.3 **Surplus Plant**

- 5.3.1 A reassessment has been made of winter plant requirements.
- 5.3.2 Over the past few years, eight Econ Unibody tipper/gritters have been procured to replace standard lorries with demonstrable gritters. The surplus gritters were retained as spares, to be fitted to lorries hired in to supplement resources when conditions became severe.
- 5.3.3 It has been found in practise that it was difficult to obtain suitable lorries at short notice for this purpose. The decision was made to dispose of four of these gritters, as well as 3 old trailer gritters used for tractor routes in the North. These routes are now done by pickups with small demountable gritters.

5.4 **Change to Treatment Strategy**

- 5.4.1 According to East Ayrshire Procedures and Resources document, "Consideration for an early morning patrol will be given, by the Duty Winter Controller, when there has been an overnight forecast of possible adverse conditions and no treatment has commenced on that route after midnight. The early morning patrol will take place either on a condensed version of precautionary salting routes (Patrol Routes) or on the full precautionary salting routes at the direction of the duty Winter Controller".
- 5.4.2 In practise, the condensed version comprises 2 high routes in the South of East Ayrshire, and 1 in the North. While the 2 routes in the South cover all main roads, the single route in the North does not. Unless all roads are dry, except for isolated wet spots normally the full call out is ordered.
- 5.4.3 Accordingly the high routes in the North, have been reviewed to ensure that all main routes are included, to enable the shortened routes to be called for more frequently and it is anticipated that this will produce revenue savings.
- 5.4.4 It is difficult to accurately quantify the savings, as these will depend on the actual conditions encountered throughout the winter e.g. continual changeable weather with freezing between showers will require full dawn patrols, while long, dry spells will allow main roads only to be done.
- 5.4.5 In the North, there are currently seven main routes and two tractor routes covering housing estate roads in the Irvine Valley and Stewarton.
- 5.4.6 The seven main routes are split into 'A' and 'B'. The 'A' part of the route covers mainly A and B class roads. The 'B' part the more minor and scheme roads.
- 5.4.7 In the condensed patrol situation, the 'B' part of the routes together with the tractor routes would be omitted, leaving main roads only to be done.
- 5.4.8 The high routes in the South, covered by 2 vehicles, achieves approximately the same level of response.

5.5 Weighbridges

5.5.1 The installation of a new weighbridge at Underwood Depot and the upgrading of the existing weighbridge at Gauchalland Depot will enable easier checks to be made on the rate of spread of salt against that specified.

5.5.2 There is a tendency for some drivers to spread more salt than required, and a saving should be achieved as a result of increased checking.

6. FOOTWAY PATCHING

6.1 At the same time the opportunity has been taken to review the current practice of patching of footways. This is the only part of the structural network not covered in the Capital Programme, and it is considered that a reduction in the current budget could be achieved here, to a revised budget of £50,000.

7. ASSESSMENT OF SAVINGS FROM WINTER MAINTENANCE REVIEW AND FOOTWAY PATCHING

7.1 Surplus Gritters

Demountable gritters	(4)	£15,936
Trailer gritters	(3)	£ 3,867

£19,803 **round up to £20,000**

The above saving is made in annual maintenance charges.

7.2 Change to Treatment Strategy

Area	Full Call Out	Condensed Call Out	Anticipated Saving
North	£1830	£980	£850
South	£1200	£500	£700
Totals	£3090	£1540	£1550

Assuming there will be 8 occasions throughout the winter when the condensed dawn patrol can be ordered, the total saving would be **£12,400**.

7.3 Weighbridges

7.3.1 Estimated annual cost of salt	-	£170,000
Estimated 5% saving	-	£8,500

8. LEGAL IMPLICATIONS

8.1 The Roads (Scotland) Act 1984, Clause 34, states that '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'.

8.2 The Council has signed a legal agreement with South Lanarkshire Council in relation to the weather forecasting contract.

9. FINANCIAL IMPLICATIONS

- 9.1 The hire of additional tractors to haul footway gritters, operation and maintenance of weather stations and weighbridge will be met from the Roads revenue budget.
- 9.2 The Roads revenue budget has been reduced by £65,900 to reflect the efficiency savings.
- 9.3 The new weather forecasting contractor provides some improvements in the service provided for similar cost to the previous contract with the Met Office.

10. RECOMMENDATIONS

- 10.1 It is recommended that the Committee note:
- i) The summary of winter maintenance operations during last winter; and
 - ii) Savings achieved as a result of the review of winter operations; and
 - iii) Savings achieved by reducing the footway patching budget.

James Lavery
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7 June 2004

LIST OF BACKGROUND PAPERS

Nil

For further information please contact Alastair Wyper on 01563 576310

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