

## Winter Preparedness 2014-15

### SUMMARY

- 1.1 This report is to demonstrate to the Overview and Scrutiny Board that the Highway Maintenance section is fully prepared for the 14-15 winter season.
- 1.2 Since setting up the in-house highway maintenance service, significant improvements have been made to the systems, procedures and equipment involved with winter maintenance. They include:
- The purchase of a modern fleet of six environmentally friendly and fuel efficient gritters, which comply with the latest government best practice guidance.
  - The installation of a city specific weather station, to give more accurate forecasts and reduce unnecessary call outs on marginal nights.
  - The thermal mapping of streets within the city to identify cold routes which may need treatment when others do not, to improve efficiency and reduce costs.
  - Making the switch to a coated road salt and treating our existing stock pile, to reduce spread rates whilst improving the effectiveness of treatments.

All of these changes comply with the best practice guidance given in the latest revisions to Appendix H of 'Well Maintained Highways' and mean that Derby has one of the most technologically advanced and efficient winter services in the country.

### RECOMMENDATION

- 2.1 To note the contents of the report and to recognise the progress made to improve efficiency, to reduce costs and to improve effectiveness of treatments.

### REASONS FOR RECOMMENDATION

- 3.1 To inform the scrutiny panel of the state of preparedness of the highway winter service for the 14-15 winter season.

## SUPPORTING INFORMATION

### 4.1 The Winter Service

Since setting up the in-house highway maintenance service, significant improvements have been made to the systems, procedures and equipment involved with winter maintenance.

We've purchased a modern fleet of six environmentally friendly and fuel efficient gritters which comply with the latest government best practice guidance. The gritters are GPS controlled and tracked, with spread rates able to be adjusted down to 1 gram salt increments, to maximise efficiency. These vehicles have been added to our existing fleet of smaller gritters for the city centre and Pride Park which give us the ability to cover many differing areas within the city.

The weather station was installed at the start of winter 2012/13. Previously we were guided by the County forecast which being more rural, is on average 1-2 degrees colder than the city. Use of the weather station has reduced unnecessary gritting on marginal nights. The station has delivered a net saving of approximately £50k over the last two winters of 2012/13 and 2013/14.

The thermal mapping exercise has further enhanced efficiency by identifying cold routes within the city which may need treatment when others don't on more marginal forecasts. We have used the information to improve efficiency and reduce costs by redesigning routes to have 3 cold routes which need treating on nights when temperatures are hovering around zero, rather than all 6 routes.

The salt barn is currently full to capacity and holds 4300 tonnes of coated road salt. The switch to a coated road salt has many advantages including:

- More targeted spreading with reduced bounce, which means less salt can be used in each treatment but will achieve the same effect.
- It is retained on the road surface for longer making it more effective.
- Corrosive properties are lessened with reduced environmental impact.
- Less salt is required which improves our stock resilience.

We have a member of the team available 24/7 between 1 October and 30 April in the Winter Duty Officer role, to ensure that resources are deployed appropriately. There are 12 gritter drivers and 1 Supervisor on standby, split into 2 shifts of 6. This is so that gritting (and snow ploughing) can take place as and when required.

The Winter Duty Officer is an important part of the process and using a variety of information they will decide what treatment is applicable to the conditions. They will consider, salt type, condition of salt and its distribution when spread, traffic levels, road surface temperatures and wetness and any special conditions such as high winds. The development of this role has contributed greatly to the savings and efficiencies made in the service.

These changes mean that we have one of the most technologically advanced and efficient winter services in the country. Highways Area Manager, Dave Kinsey was

recently invited to the Cold Comfort seminar to give a presentation on the changes and improvements to efficiency made in Derby.

#### 4.2 **Media Coverage**

We have a dedicated media campaign every year due to the interest winter gritting and snow clearance generates. We've been working hard with our colleagues in communications to finalise this campaign. We propose to:

- To prepare an info-graphic with DCC winter based facts and figures for use on our web site, Facebook page, Twitter and Instagram. Suggested facts and figures are included in section 4.3.
- We are part of the Highways Agency winter maintenance group on Facebook – all members share information, posters, images and ideas. The link is – [www.facebook.com/winterhighways](http://www.facebook.com/winterhighways)
- Use current freely available Highways Agency posters, initially just to use electronically but we can print off, with added DCC logo to highlight issues and raise awareness if needed.
- Continued use of 'Gritter Twitter' to highlight preparedness, gritting routes, salt stats and actual gritting when winter weather arrives.
  - 2014 will be our fourth year of Gritter Twitter and we get a very positive response to our efforts to keep residents informed.
  - Twitter followers to date = 12,500.
- Updating pages on web site - <http://www.derby.gov.uk/transport-and-streets/roads-highways-pavements/gritting/> to include more images and to look more engaging.
- Increased use of Instagram to visualise the service doing its job – loading salt, gritters waiting to go out etc. to raise awareness (increasing number of young people 18-24 using Instagram).
- Consider working with local schools to name our new gritters.
- Planning a series of stories based on the salt barn, new gritters, planned routes, changes in gritting due the move to a coated salt (and what that means), how communities and individuals can help themselves.

#### 4.3 **Facts and Figures for the Info-Graphic**

- 6 Gritters.
- 1 Spare Gritter.
- 3 Smaller Gritters (for the city centre and Pride Park).
- 4300 Tonnes of Salt.

- We're on call 24/7.
- A minimum of 3 detailed forecasts checked per day.
- Continuous 24/7 weather monitoring in severe events.
- Annual Budget £420,000.
- One week of heavy gritting (out twice per day) = 3600 miles which is the equivalent of driving to St Petersburg and back.
- 193 Grit Bins across the city which require regular restocking.
- We grit 38% of the city's roads.
- 12 fully trained drivers on standby.
- No of gritting runs per year
  - 2009/10 – 124
  - 2010/11 – 118
  - 2011/12 – 81
  - 2012/13 – 94
  - 2013/14 – 37
  - Average - 91

## OTHER OPTIONS CONSIDERED

5.1 None.

**This report has been approved by the following officers:**

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|---|--|
| <b>Legal officer</b><br><b>Financial officer</b><br><b>Human Resources officer</b><br><b>Service Director(s)</b><br><b>Other(s)</b> | Tim Clegg  |
| <b>For more information contact:</b><br><b>Background papers:</b><br><b>List of appendices:</b>                                     | David Bartram 01332 641516 david.bartram@derby.gov.uk<br>None<br>Appendix 1 – Implications |

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| <b>IMPLICATIONS</b> |
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**Financial and Value for Money**

- 1.1 Savings have been driven year on year whilst improving service levels, through new technology and increased efficiency.

**Legal**

- 2.1 This is a statutory function and its continued success helps to protect the Council from third party claims.

**Personnel**

- 3.1 None

**IT**

- 4.1 None

**Equalities Impact**

- 5.1 None

**Health and Safety**

- 6.1 The winter service is crucial to the safety of road users in the city.

**Environmental Sustainability**

- 7.1 New vehicles and the change to a coated salt will improve the environmental impact of this service.

**Property and Asset Management**

- 8.1 No implication for property but the service helps to protect users of the highway from accidents and reduces consequential damage to our highway assets.

**Risk Management**

- 9.1 This helps to protect against third party claims against the council.

**Corporate objectives and priorities for change**

- 10.1 This service delivers better outcomes for our communities in adverse weather, has delivered improved value for money by being more efficient and effective and is delivered by a skilled and motivated workforce.

