

Smarter Cities and Winter Maintenance

new thinking at work



Brendan Frankgate
Assistant Group Manager
Glasgow City Council

Contents

- Challenges
- Benefits of Severe Weather Hub
- Gritting Technology and Real-Time Information
- Publicity and Self-Help
- Future City Glasgow

Challenges

- Budget Constraints
- Weather Forecasting
- Fleet Profile
- Perception
- Record Keeping





Winter Maintenance Expenditure





Who Do We Coordinate With?









Severe Weather Hub

new thinking at work

Real-Time Information

Efficient Communication

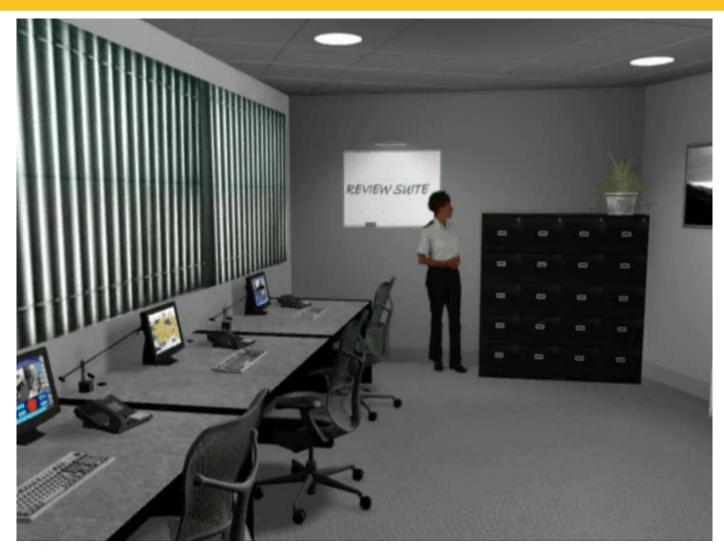
- Partnership Working
 - TRAFFCOM & Police Scotland



"Having LES and TRAFFCOM working together and operating under the same roof allows access to more information, more intelligence and quicker identification of incidents on our roads and streets."



Severe Weather Hub





Mobile Technology and Real-Time Information

new thinking at work

- Live Gritting on public facing
 Connect Website
- Vehicle Tracking:

Management Reports

Audit data for claims, FOIs & customer complaints

Routing & Optimisation:

RouteSmart Navigator & in cab tablet device mapping with audio commands & link to gritter control to allow for automated gritting





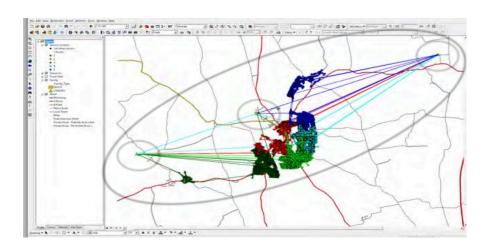
Appendix H: Compliant Spread Rates

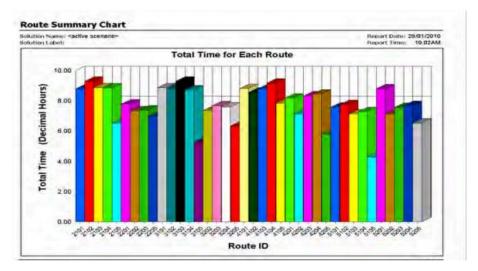
Salt Type	Precautionary Treatment for Frost / Ice	Column K Good Cover Medium Traffic Normal Loss
Dry Salt	Table H9 - where the road surface is dry no action is needed even when conditions are below zero RST at or above -2 C and damp road conditions	10g/m²
Treated Salt		10g/m²
Dry Salt	RST at or above -2 C and wet road conditions	10g/m²
Treated Salt		10g/m²
Dry Salt	RST below -2 C and above -5 C and dry or damp road conditions	15g/m²
Treated Salt		10g/m²
Dry Salt	RST below -2 C and above -5 C and wet road conditions	20g/m²
Treated Salt		1 x 20g/m² then monitor and treat as required
Dry Salt	RST at or below -5 C and above -10 C and dry or damp road conditions	20g/m²
Treated Salt		1 x 20g/m² then monitor and treat as required
Dry Salt	RST below -5 C and above -10 C and wet road conditions	1 x 20g/m² then monitor and treat as required
Treated Salt		1 x 20g/m² the monitor and treat as required



Route Planning and Optimisation

- Number of Priority 1 Carriageway Routes reduced from 21 to 15
- Delivering the same level of service more efficiently
- Increased visibility of gritting operations







Consultation and Engagement





- Engagement with Elected Members
 - WMP link/hard copy provided
 - WMP reviewed and committeeapproved each year
 - Formal consultation every two years

- Engagement with the public
 - Social Media
 - Broadcast Media
 - Press Releases
 - Winter Page on Connect website
 - Customer Care Centre
 - MyGlasgow App





Snow Wardens and Self-Help

- Technology is important but never forget our most important asset: the local community
- Snow Wardens are recruited, trained and supported by LES in partnership with Clean Glasgow & CSG
- 75 volunteers use local knowledge to support the front-line winter maintenance operation
- Snow wardens know the elderly and vulnerable residents that need support in severe weather
- 1360 grit bins and free supplies of grit
- FindMyNearestGritBin





The Smart City

new thinking at work

Future City Glasgow

- Intelligent Street Lighting
- Open Data
- 'Crowdsourcing' Information

- Live Tracking
- Find my Nearest Grit Bin
- MyGlasgowApp





