



Winter Maintenance - 2013

new thinking at work





Winter Maintenance Plan 2013/2014

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Winter Maintenance Plan
2013 - 2014



1. Statement of Policies and Responsibilities
2. Quality
3. Route Planning
4. Weather Prediction and Information
5. Organisational Arrangements and Personnel
6. Plant, Vehicles and Equipment
7. Salt and De-Icing Materials
8. Operational Communications
9. Information and Publicity





Quality System

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- The Winter Maintenance service is part of the Roads Integrated Management System (IMS) and is externally audited (SGS)

AREA: ROADS CITYWIDE

Day Grit

1

DATE:

SECTION 1

ROAD CONDITIONS PLUS TEMP @	05:00hrs - 08:00hrs	Max		Min		IMMEDIATE BY TIME BEGIN S.S.#	IMMR		ENTER		INTERNAL P/WAYS & C/WAYS WITHIN DEPOT CHECKED & TREATED (Y/N)	
Treatment Instructions					Time Treatment Commenced					Time Treatment Completed		
					Treatment Completion Time	00:00				Pl Check	PASS	

SECTION 2

Number	Stages	Number	Stages	Number	Stages	Number	Stages	Number	Stages	Number	Stages	Number	Stages
G1		G4		G7		N3		N20		N23		N26	
G2		G5		G10		N4		N21		N24		N27	
G3		G6		GCC		N7		N22		N25		NCTE	
Routes Part Completed													
Number of Priority Routes Gritted: 0 Number of Priority Routes Ploughed: 0 Number of Priority Routes Ploughed and Gritted: 0 Number of Priority Routes to be Gritted: 21													

SECTION 3

Route	G9a	G9b	Carparks	TOTAL
Complete (Y/N)				0

SECTION 4

No	Stk	No	Stk	No	Stk	No	Stk	No	Stk	No	Stk	No	Stk	No	Stk	No	Stk	No	Stk
1	7	13	15	25	31	35	41	45	54	56a									
2	8	14	28	25	32	38	42	46	52	56b									
3	5	15	24	27	33	37	42a	47	53	56c									
4	18	16	22	28	34	38	42a	48	54										
5	11	17	23	23	35a	33	43	43	55a										
6	12	18	24	31	35b	41	44	51	55b										
Routes Part Completed																			
SECONDARY ROUTES Number of Secondary Routes Gritted: 0 Number of Secondary Routes Ploughed: 0 Number of Secondary Routes Ploughed and Gritted: 0 Number of Secondary Routes not Treated: 63																			

Legend:
 For Bulk Priority & Secondary Routes:
 Gritted Routes should be marked "G"
 Ploughed Routes should be marked "P"
 Ploughed and Gritted Routes should be marked "PG"

SECTION 5

RESOURCE \$ USED	SALT IN STOCK TONNES	START	FINISH	USED	REMARKS	When Gritting
				0.00		
	GRITTERS AVAILABLE	START	BREAKDOWN	REPAIR	FINISH	
					0	
	NUMBER OF DRIVERS AVAILABLE	START	UNAVAILABLE			

SECTION 6

ROAD SURFACE CONDITIONS AT 05:00hrs

SECTION 7

SUPERVISOR: _____
 SIGNATURE: _____

To be returned by email no later than 09:00hrs to: ISS@hazbin.co.uk

File name should reflect the area and date/time.

AREA: NORTH WEST

DATE:

SECTION 1

INTERNAL FOOTWAYS & C/WAYS WITHIN DEPOT
CHECKER & TREATED BY/BI

Weather Conditions AMI PHI

SECTION 2

Priority Routes CC1 CL1 CL2 CL3 PK1 PK2 PK3 PK4 PK5 PK6 PK7 PK8 PK9 PK10 PK11 PK12

Number of Priority Routes Gritted 0
 Number of Priority Routes Ploughed 0
 Number of Priority Routes Ploughed and Gritted 0 Total Priority routes 16
 Number of Priority Routes with Sufficient Residue 0
 Number of Priority Routes required to be Gritted 16

SECTION 3

Footbridge Gritted Y/N Bridge G1 G2 G4 G5 G7 G8 G9 L1 L2 L3 L4 H15 H22 TOTAL

SECTION 4

Neighbourhood Footway Routes	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	
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NEIGHBOURHOOD FOOTWAY ROUTES
 Number of Sub-routes Gritted 0
 Number of Sub-routes Ploughed 0
 Number of Sub-routes Ploughed and Gritted 0 Total Neighbourhood routes 171
 Number of Sub-routes with Sufficient Residue 0
 Number of Sub-routes not Gritted 0

Legend:
 For both priority and Neighbourhood Routes:
 Gritted Routes should be marked 'G'
 Ploughed Routes should be marked 'P'
 Ploughed and Gritted Routes should be marked 'PG'
 Route not Treated- Sufficient Residual Salt/ Grit Present 'RS'

SECTION 5

Grill Bin Routes	Route	14	15	18	19	23	28	31	32	33	34	35	36	37	38	39	40	TOTAL
Head Piles		15	6	16	21	31	15	7	19	29	18	28	48	39	32	13	38	354
Complete	Piles Filled																	0

SECTION 6

No of New Insulated in Winter Maintenance Tonnage of Salt Used T

SECTION 7

Name



Weather Predictions, Information and Decision Making

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The support information for use in 'Decision Making' will usually be a combination of

- a) the road weather forecast – Provided by MeteoGroup UK Ltd
- b) road and weather monitoring data (Weather Stations)
- c) actual condition of the network



Weather Predictions, Information and Decision Making

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Ice Detection Outstations are installed at 4no. selected locations within the city and the Council has access to a further 6 in the greater Glasgow area.

- a) road surface temperature
- b) deep road temperature
- c) air temperature
- d) wind speed and direction
- e) relative humidity
- f) precipitation.
- g) surface state (including level of salt present on road surface)



Information to be provided

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Specification of Forecasts

- a) Morning Summary - available from around 07:00 hours. This forecast is for the next 12 hours.

- b) Main Lunchtime Forecast - available between 12:00 and 14:00 hours. This forecast contains a 24 hour text forecast giving a 2-5 day forecast of expected hazards

- c) Evening Update - available from around 19:00 hours. This forecast provides the same information as the lunchtime forecast, with any changes highlighted

- d) Other Updates – Provided during changeable periods as necessary



Route Planning

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- The pre and post salting routes are reviewed on an annual basis taking into account any alterations to the roads which are treated under the specified gritting criteria.
- The main treatment options are as follows:
 - Precautionary pre salting
 - Post salting
 - Snow routes
- Routes have been devised to ensure efficient coverage within reasonable timescales.



Priority 1

Carriageway routes for precautionary Treatment

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The following Priority 1 roads will be treated if it is forecast that ice or snow is likely to be present on road surfaces.

- All main bus routes registered at the end of the summer in any year within the City
- Roads or parts of roads not used by buses but being A or B Class roads or main connecting roads
- The dropping off points on public carriageways from the nearest gritted route for special school buses and ambulances
- Routes from: fire stations; police stations; bus garages and emergency vehicle locations
- Roads to Park and Ride car parks
- Hills steeper than 1 in 10 gradients
- Specially designated industrial areas



Priority 1

Footways routes for precautionary Treatment

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- Pedestrian precincts
- Prioritised City Centre Footways with high pedestrian traffic
- Shopping Centres out with the City Centre
- Access routes to Schools
- Hills steeper than 1 in 10 with moderate pedestrian traffic



Priority 2 and Priority 3

Carriageway/Footways Routes for Post Treatment

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Given the presence of ice or snow on roads and a forecast that these conditions will last for a period longer than it would take to treat these carriageways/footways, appropriate treatment will normally take place, between 07:30 and 18:30 the following day unless otherwise directed.



Priority 2 and Priority 3 Carriageway/Footways Routes for Post Treatment

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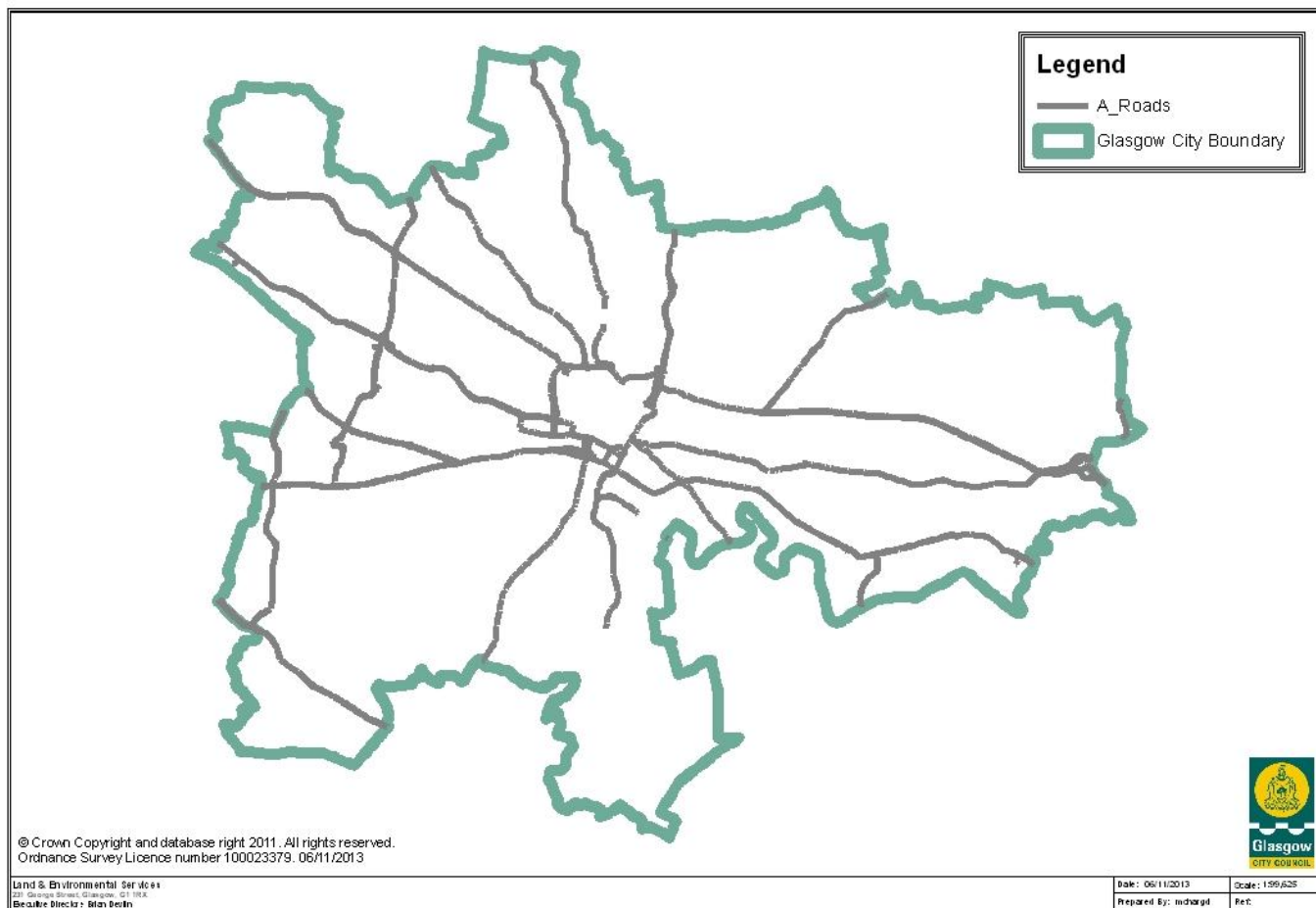
Priority 2 Carriageway/Footways Routes: Locations which include the following amenities:

- Local shops
- Health Centres and Day Care Centres
- Community Sports Centres and Libraries
- Places of worship and any other places of local significance
- Appropriate link routes to main Priority 1 carriageways/footways within each area

Priority 3 Carriageway/Footways Routes: All remaining carriageways/footways

Routes for Snow Clearance

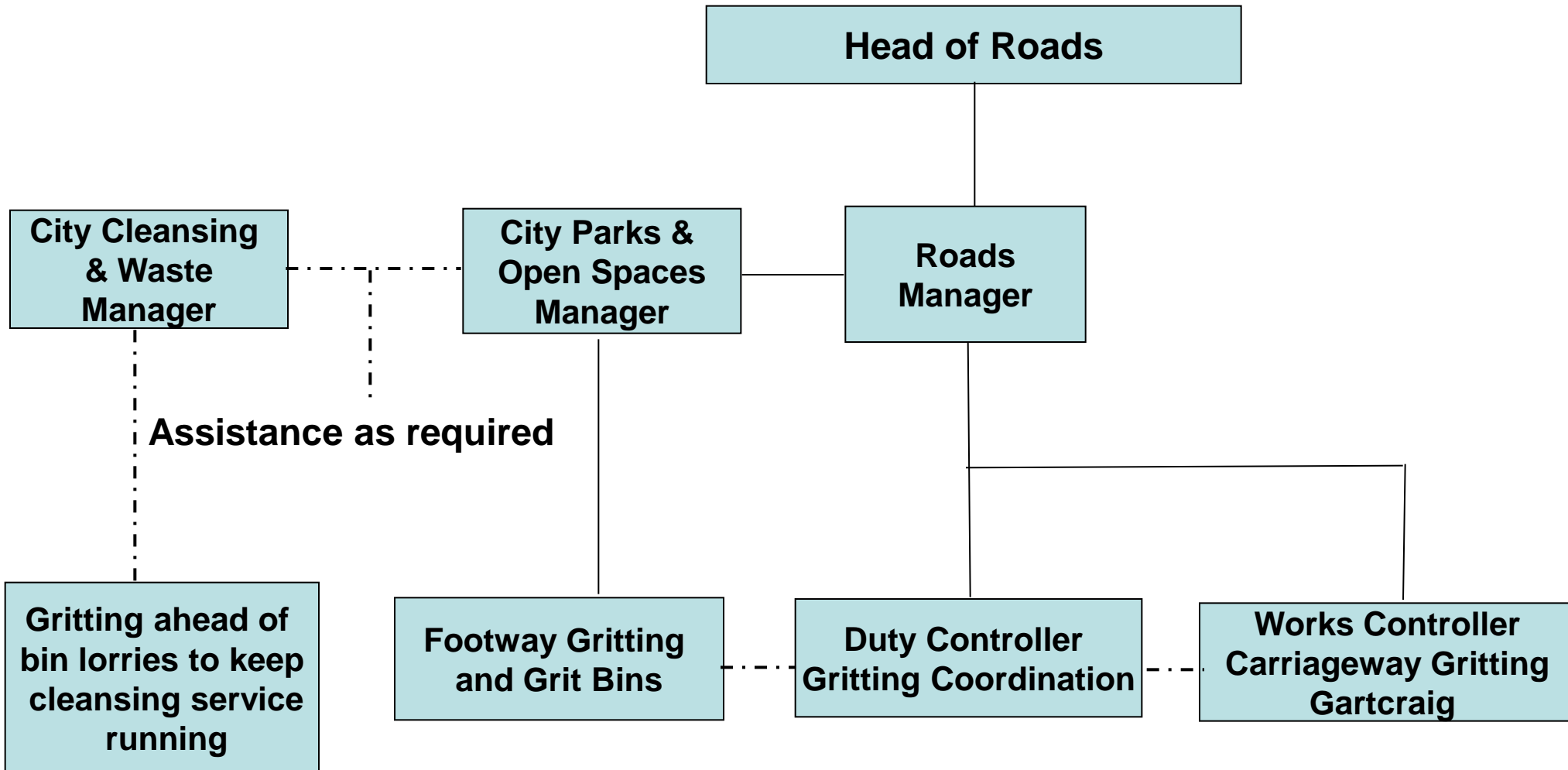
These cover the Cities main arterial roads





Organisation Priorities and Personnel

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Roads Operations

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- Glasgow City Roads Trading Operations operates a 365 day 24hr service
- During Winter
 - 16 Nightshift Drivers 7pm till 7am
 - 28 Pool Drivers working a variable hrs contract
 - 36 Drivers working standby
- However, standby drivers are rarely used only in the most extreme conditions
- In addition we have 160 operatives



Roads Operations

- Are responsible for gritting all carriageway priority and neighbourhood routes
 - 950km priority
 - 800km neighbourhood
- Managing the distribution of 22000t of salt
- Provide resources to support LES operations



Parks and Cleansing

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- Responsible for gritting all P1, P2 and P3 footway routes.
- Checking and filling the 1247 grit-bins available throughout the city.



Cleansing Operations

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- Deployment of Street Cleansing vehicles in front of Refuse Collection vehicles to grit roads/ lanes/high rise flat concourses to maximise accessibility.



Self Help

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Neighbourhood Improvement Volunteers (NIVs)

- Currently 60 active volunteers
- Each co-ordinate local groups to clear their own street
- We supply each volunteer with
 - Safety Vests
 - Snow Shovels
 - Gloves
 - Salt
 - Training



Additional Resources

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During severe weather conditions the Roads Manager may augment resources from other Glasgow City Council Departments, Glasgow Housing Association employees and/or contractors.



Training

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- Duty Controllers and Verifiers should have received MeteoGroup UK Ltd Open Road Forecast Training.
- Winter Supervisors and Winter Maintenance Operatives should have received training on all aspects of their duties.
- All Winter Operatives will undergo a familiarisation exercise with all plant and procedures before the onset of the Winter.
- Toolbox Talk on Manual Snow Clearing and Gritting
- Training in the safe use of any equipment



Plant and Equipment

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Description	Capacity	Quantity
Demountable Gritters	6 cu metre	26
Demountable Mini Gritters	0.6 cu metre	2
Trailer Gritters (Footway)	0.5 cu metre	32
Trailed Gritters (Carriageway)	2 cu metre	12
Pedestrian Spreader	0.5 cu metre	9
Snowploughs	-----	37
Slushblades	-----	27
Large Tractor Units with Gritters and Ploughs	1.2 cu metre	13
Mid-Range Tractors with Gritters and Ploughs	0.8 cu metre	13
All Terrain Vehicles / Small Tractors with Ploughs and Gritters	0.5 cu metre	16
Powered Pedestrian Mowers fitted with Footway 1.3m Ploughs	Scags	56

LES Transport will provide support to keep the fleet mobile and also arrange for any hired equipment needed

Plant and Equipment





Salt and De-Icing Materials

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- Salt will be kept in salt barns at Gartcraig (6500T Safecoat), Nitshill (5500T Safecoat and 4000T Salt), Stonehouse (5000T Safecoat) and Queenslie (1000T Salt).
- The quantity of salt held in stock at the start of November 2013 will be 22,000tonnes.
- Supplies are topped up throughout the winter as required



Salt for Self-Help

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In addition to the grit bins and temporary grit sacks, small quantities of salt (10kg MAX) will be available to the public for self loading in their own containers at the depots listed below. The hours of salt availability at the depots are Monday to Sunday.10am - 4pm.

Local Parks

Victoria Park
Greenfield Park
Springburn Park
Kings Park

Disposal Complexes

Dawsholm Complex
Polmadie Complex
Easter Queenslie Complex
Shieldhall Complex



Operational Communications

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- All large carriageway gritters are fitted with a GPS which allows the sections of road which have been treated to be clearly identified along with the time of treatment.
- All large carriageway gritters have also been fitted with route navigation devices. These specially designed voice activated devices will improve driver Health and Safety as there will be no need to use route sheets.



Information and Publicity

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- It is important that the general public is aware of and understands Glasgow City Council's approach to the Winter Maintenance Service.
- Publicity is to be given before the beginning of the winter period describing the level of service provision and operational contact points.
- During the winter period and particularly during prolonged spells of snow and ice information will be made available to the public via:
 - a) Press releases
 - b) Local Radio Stations
 - c) GCC Website
 - d) Social Media - Twitter



Welcome to Glasgow



SEARCH

You are in: Home : Living : Getting Around : Roads : **Winter Maintenance**

- Living
- Getting Around
- Roads
- Bus Lane Enforcement
- Clyde Tunnel
- East End Regeneration Route
- Keep Glasgow Moving
- M74 Completion
- Roadworks
- Statutory List of Public Roads
- Structures

Winter Maintenance

- Common Questions
- Common Questions - Priority Routes
- Driving Tips
- Further Information on the Salt Used
- Salt Supplies
- The Snow Code
- Live Gritting Information
- Winter Maintenance Contacts and Useful Links

Winter Maintenance



Winter Maintenance

Winter maintenance is crucial in terms of both the economy and road safety, and is carried out to assist the safe movement of road users including buses, cyclists, motorcyclists and pedestrians and minimise delays caused by adverse weather conditions.

What We Do

The council's aim is to provide an effective and efficient winter maintenance service within the city boundaries with the resources available which means:

- helping to ensure the safe passage of vehicles and pedestrians
- aiming to minimise delays due to winter weather
- ensuring winter maintenance operations are undertaken safely

Land and Environmental Services provides this service from October through to mid April



Future Service Improvements

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- Reduce the existing 21 priority carriageway routes to 10 area based routes & 6 longer strategic routes
- Reduction in existing carriageway gritting fleet from 26 demountable 6m³ gritters to 14 demountable 6m³ gritters & 6 PMG 10m³ gritters
- Reduction in seasonal drivers
- Reduce operational costs from gritter replacement programme – zero rated road tax & rebated fuel for PMGs
- Improved utilisation in summer for the remaining 14 large lorries (18Tonne)



Last Thought!

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“Failing to Plan is Planning to Fail”

“best-laid schemes o' mice an' men gang aft a-gley.”
(best-laid plans of mice and men oft(en) go astray)

After all we are dealing with:

“The good old Scottish Weather”