



Statens vegvesen

Mengderapportering, vinteren 2008/2009

RAPPORT

Teknologiavdelingen

Nr. 2564



Vegteknologiseksjonen
Dato: 2009-08-14



Statens vegvesen

Vegdirektoratet
Teknologiavdelingen

Postadr.: Postboks 8142 Dep
0033 Oslo

Telefon: (+47 915) 02030

www.vegvesen.no

TEKNOLOGIRAPPORT nr. 2564

Tittel

**Mengderapportering,
vinteren 2008/2009**

Utarbeidet av

Ida Einerkjær

Dato:

2009-08-14

Saksbehandler

Åge Sivertsen

Prosjektnr:

Kontrollert av

Øystein Larsen

Antall sider og vedlegg:

22

Sammendrag

Dette er en rapport som er utarbeidet for å få en oversikt over ressursbruken i vinterdriften, samt å se på utviklingen fra 2004 til 2009. Rapporten inneholder tall for salting, sanding og brøyting.

Summary

This report is written to get an overview of the resources used in the winter, and to look at the development from 2004 till 2009. This report contains numbers for salt, sand and snow-clearing.

Emneord:

vinterdrift, salting, sanding, brøyting

Forord

Denne rapporten er utarbeidet for å få en oversikt over ressursbruken i vinterdriften, samt å se på utviklingen fra 2004 til 2009.

Rapporten er basert på skjema R12, definert i funksjonskontraktene der entreprenørene rapporterer inn mengdedata for hver kontrakt. Det kan være mangler i datagrunnlaget.

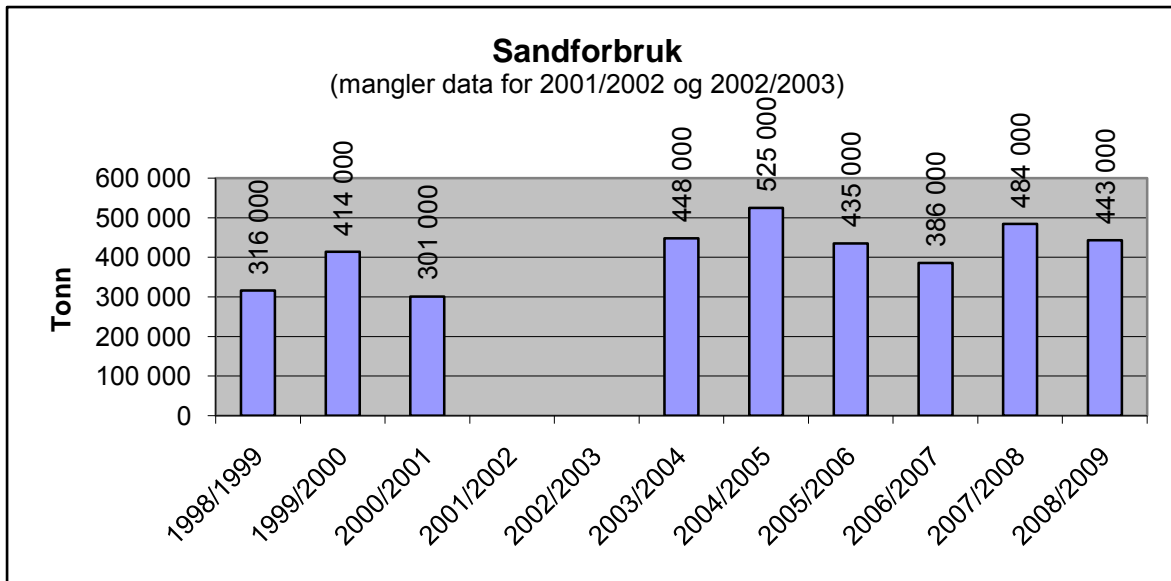
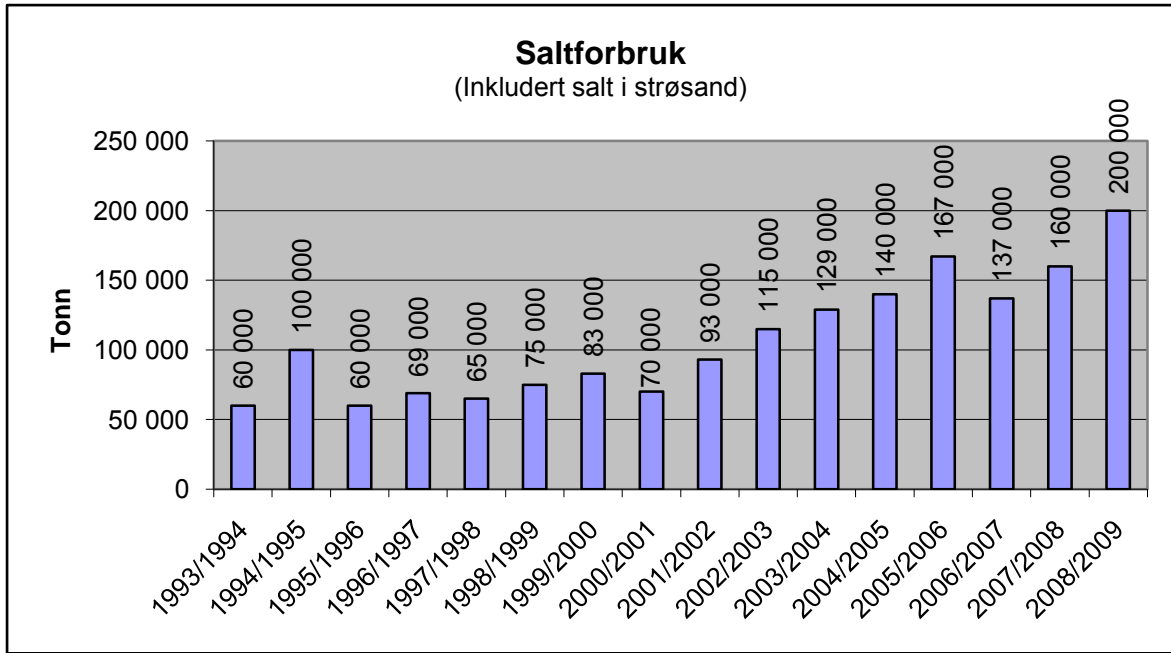
De årlige mengdene omfatter vintersesongen fra oktober til mai. Det oppgitte årstallet i diagrammene viser til siste halvdel av sesongen.

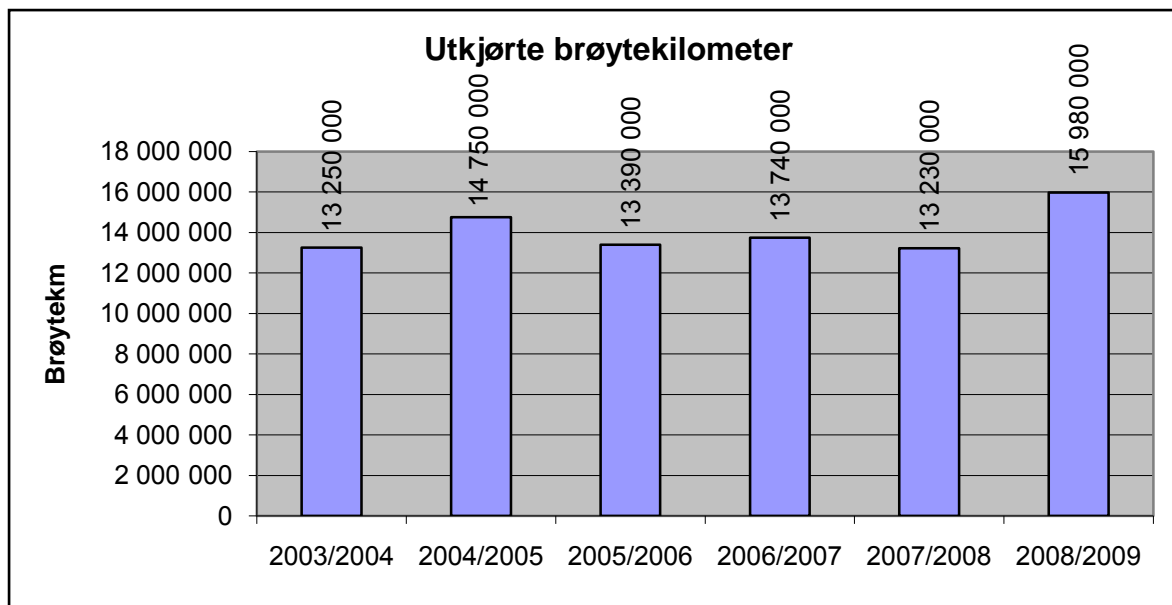
Mengdene har gått betydelig opp for både salting og brøyting i sesongen 2008/2009. Mengden sanding har sunket. Årlige klimavariasjoner kan ha stor betydning for ressursbruken fra år til år.

Innholdsfortegnelse:

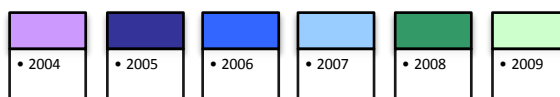
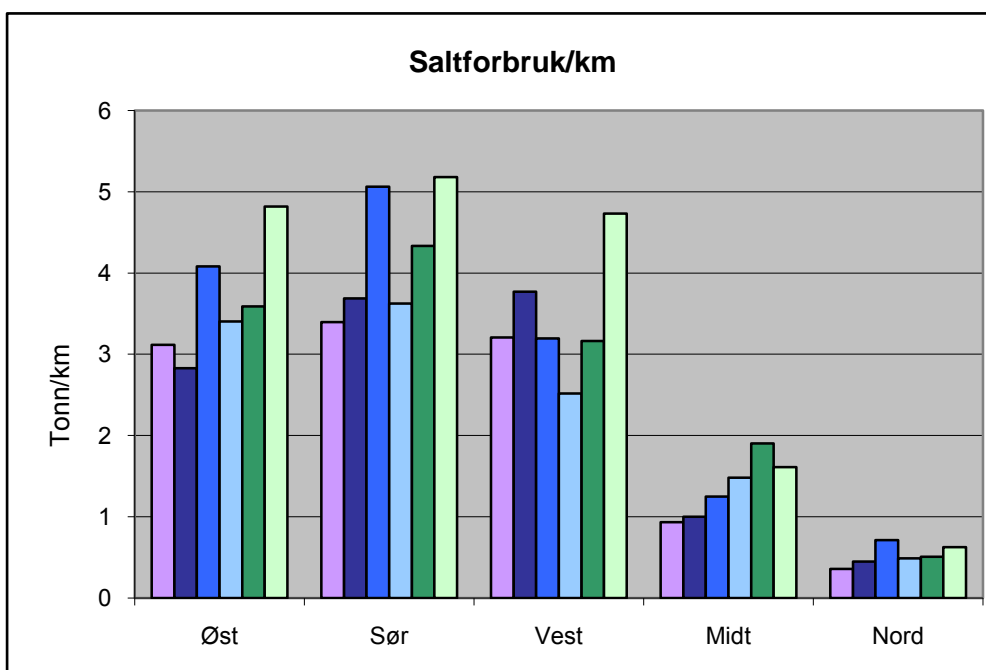
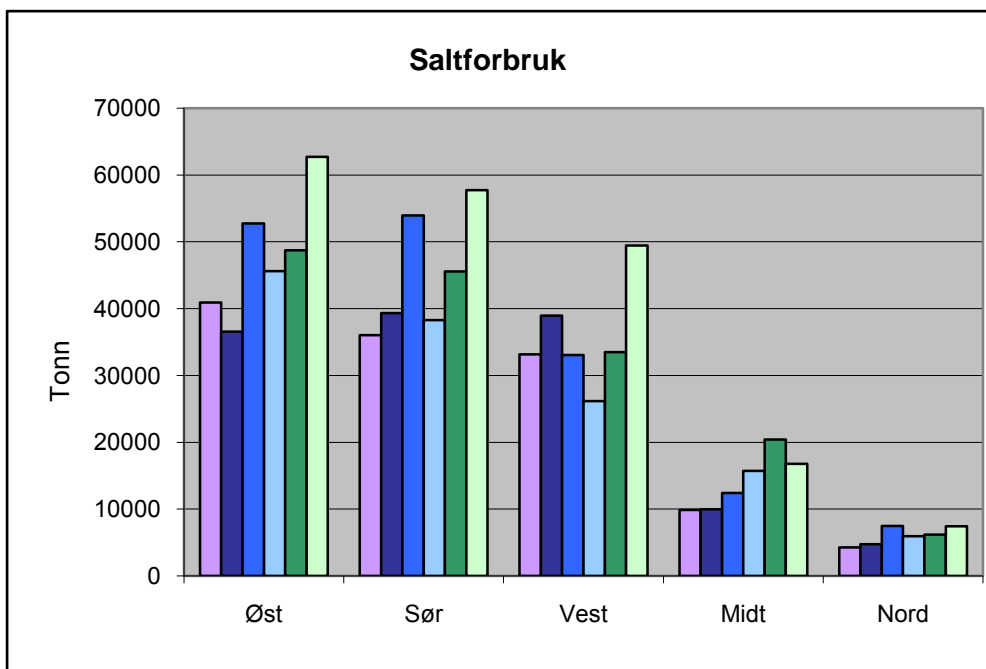
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Utvikling i mengde per år

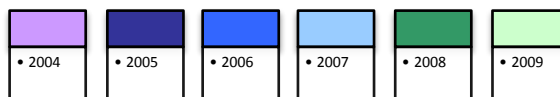
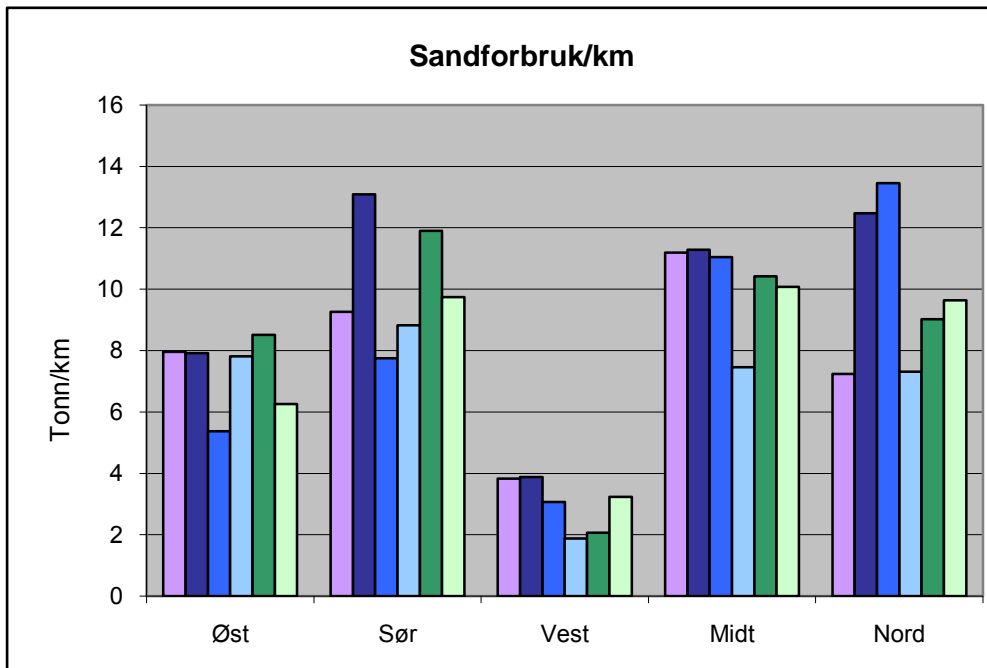
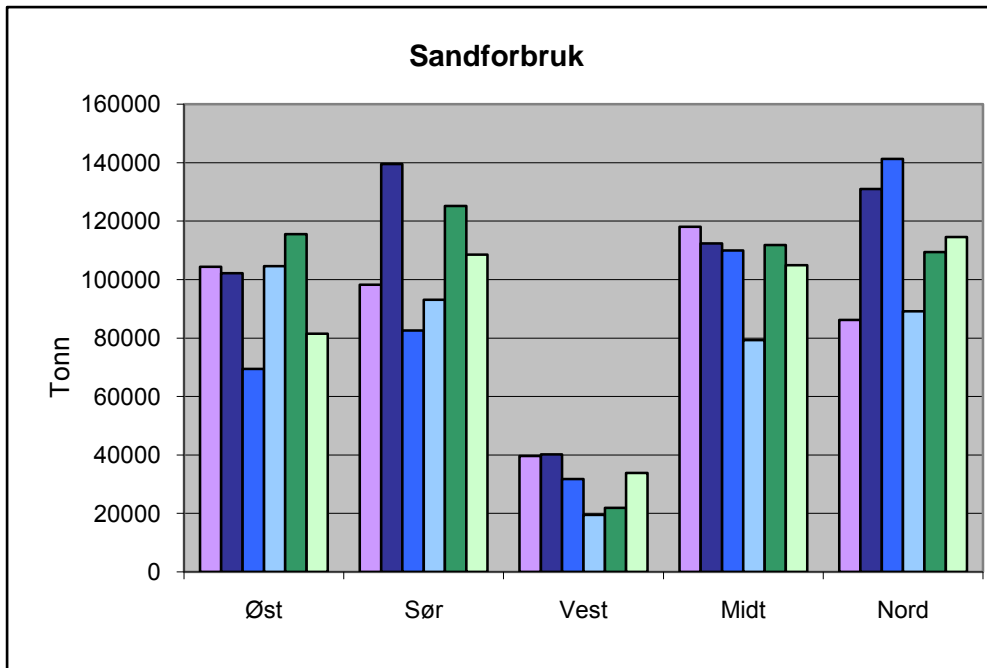




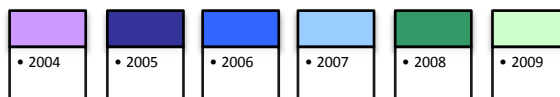
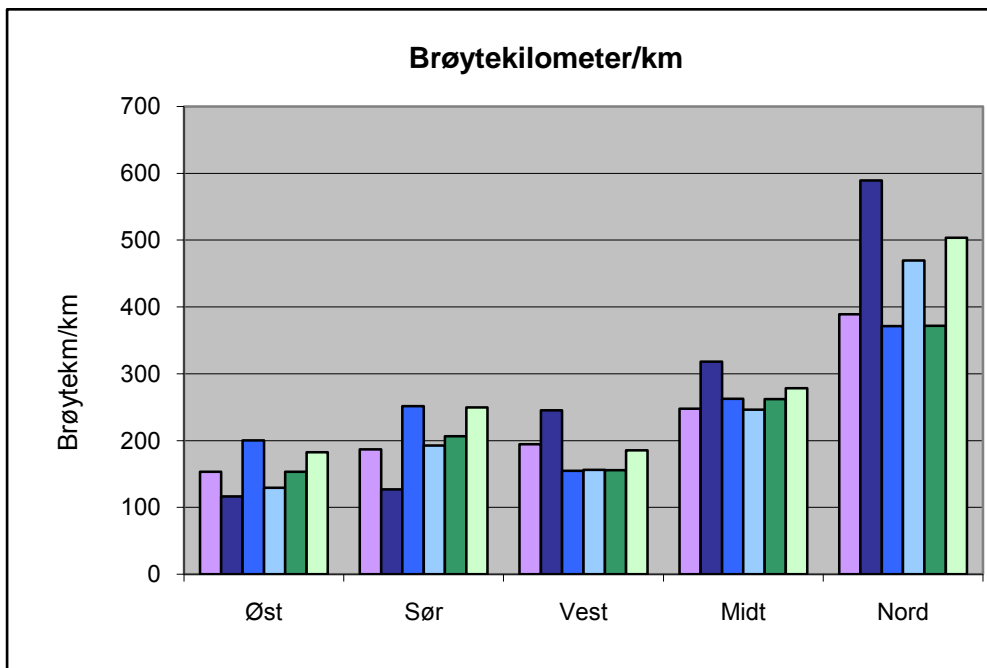
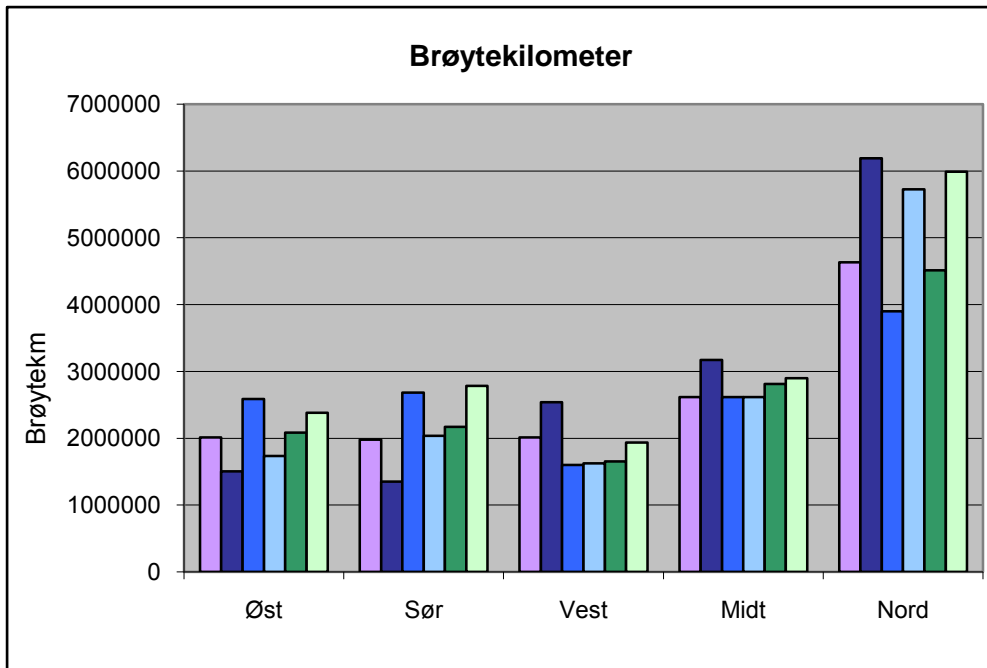
Saltforbruk per Region



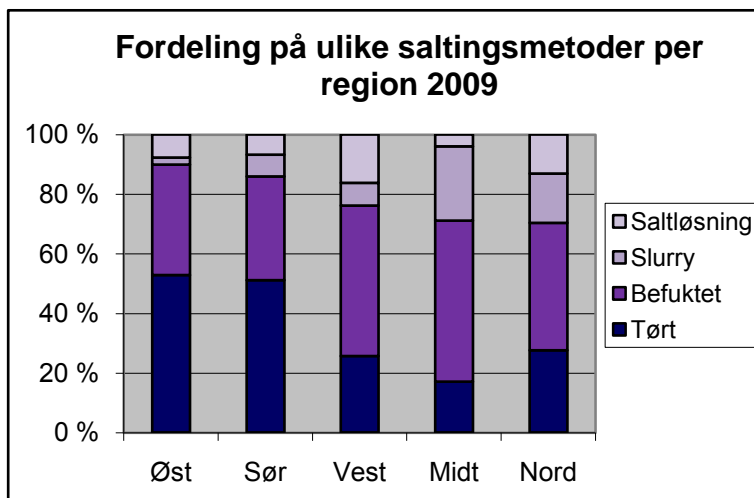
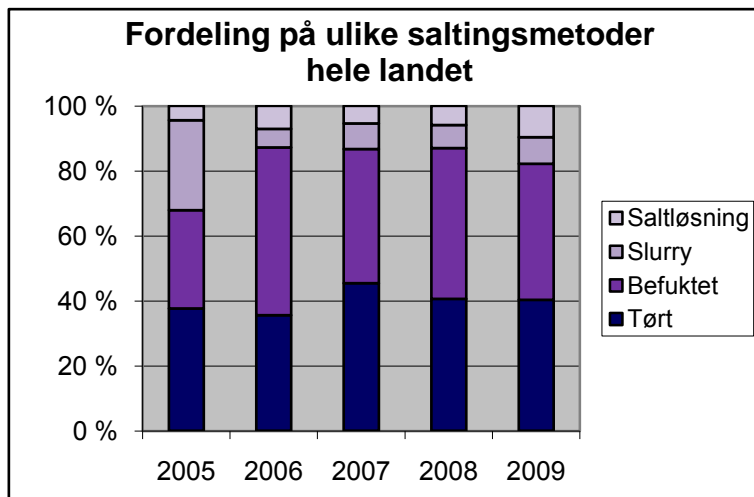
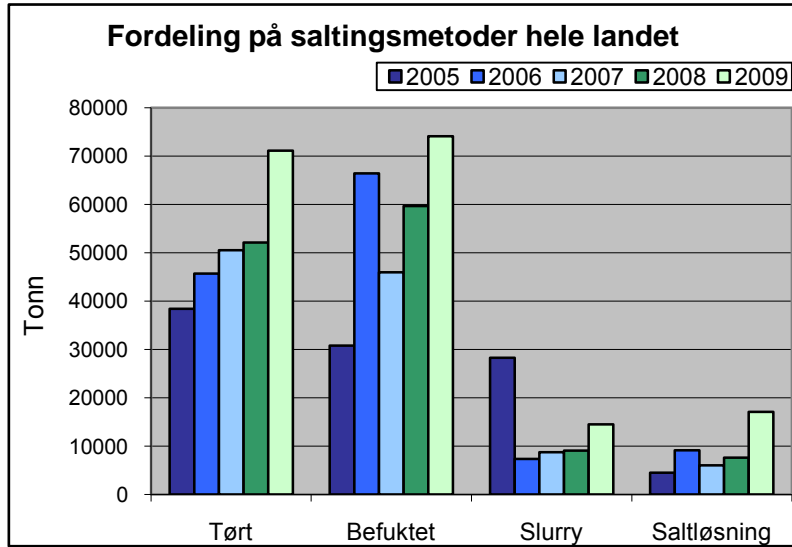
Sandforbruk per Region



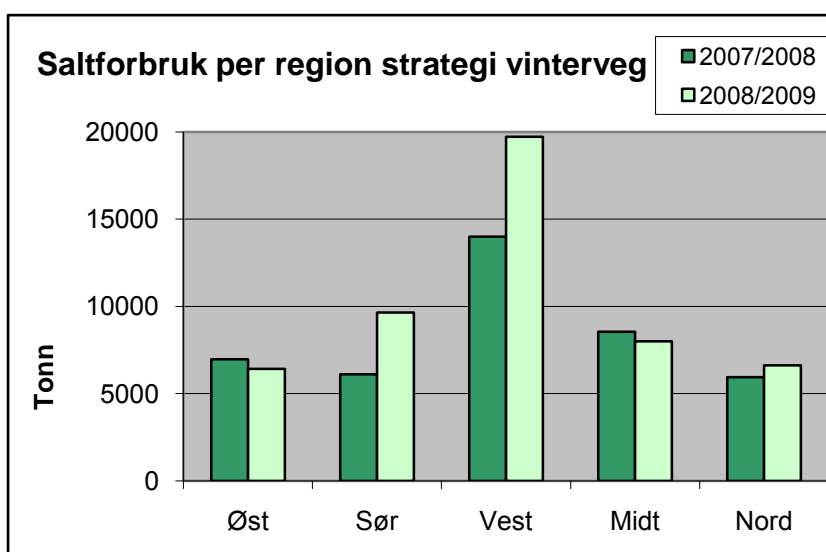
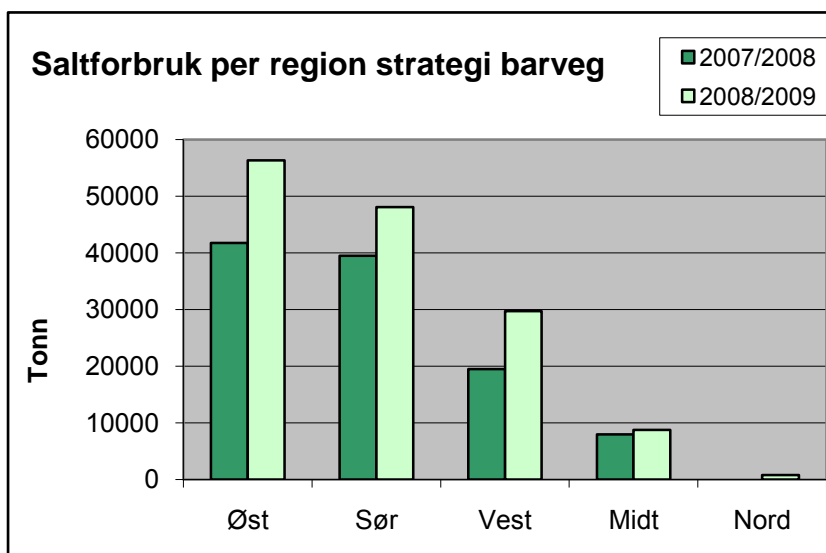
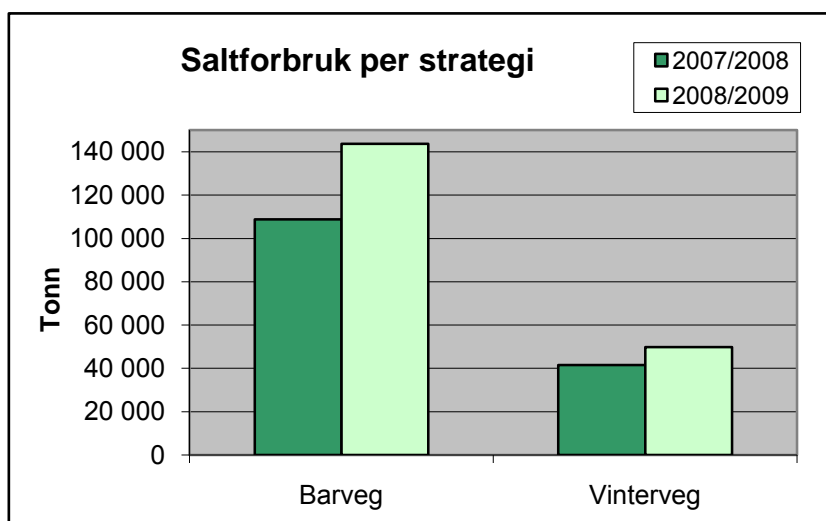
Brøytekilometer per Region

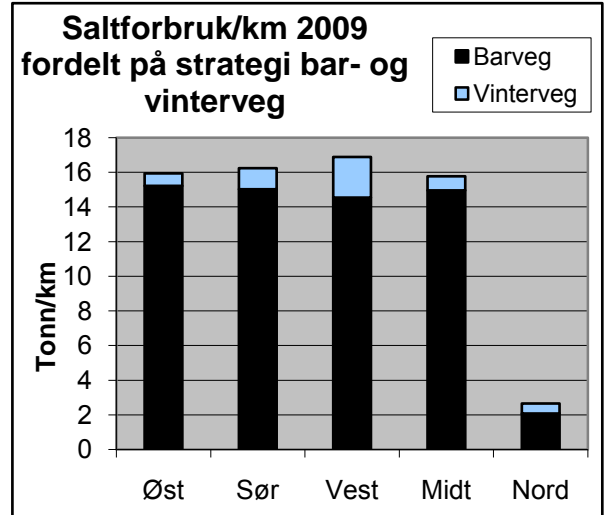
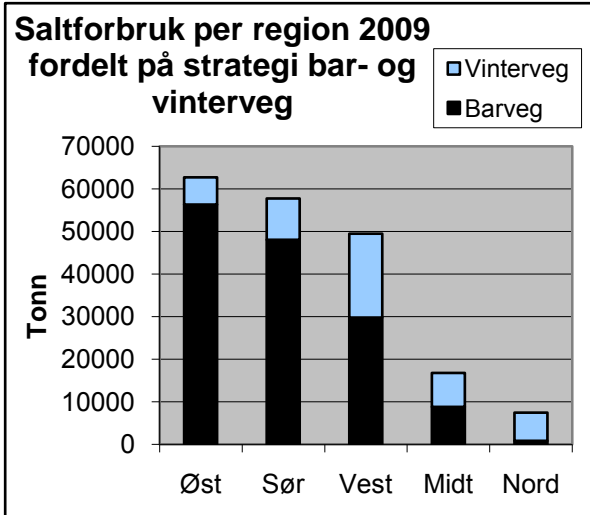


Fordeling på ulike saltingsmetoder

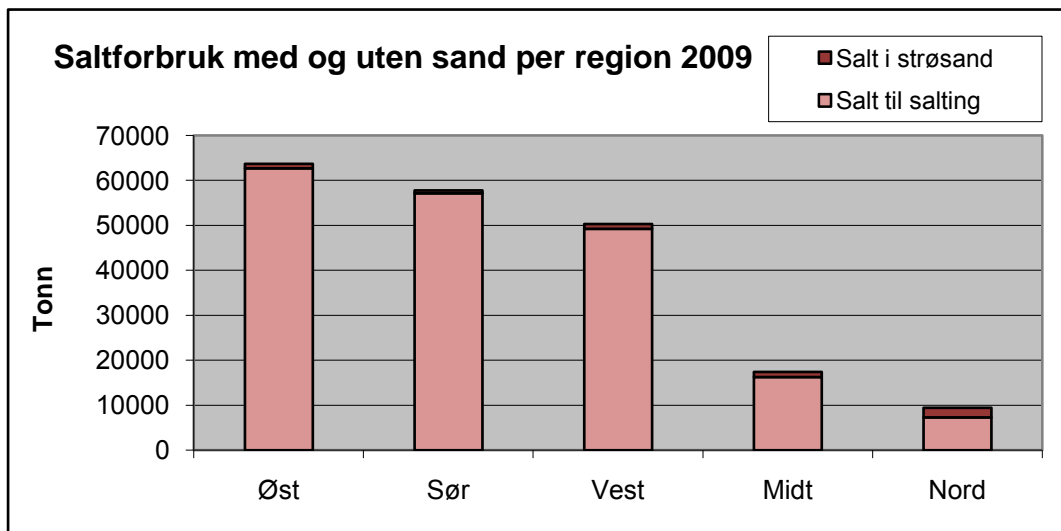
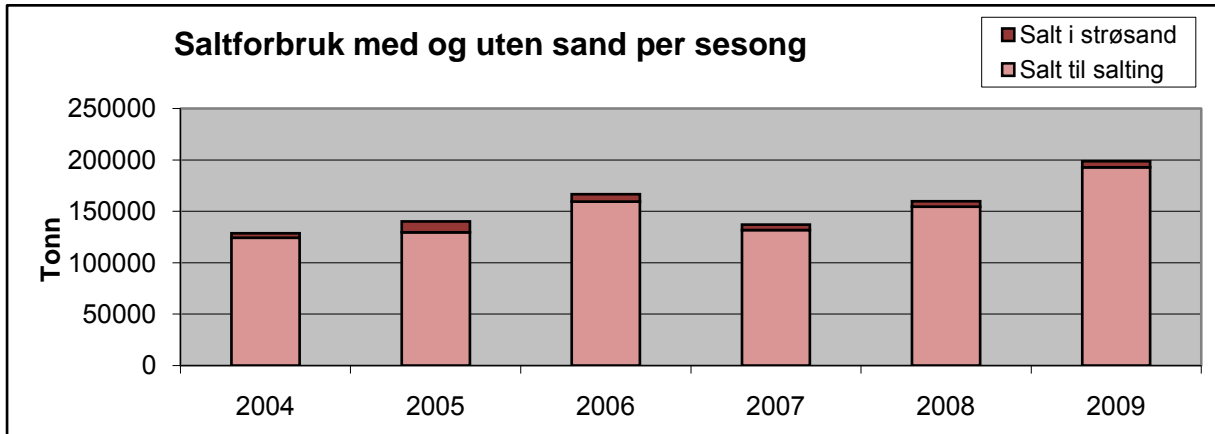


Saltforbruk på strategi barveg og vinterveg



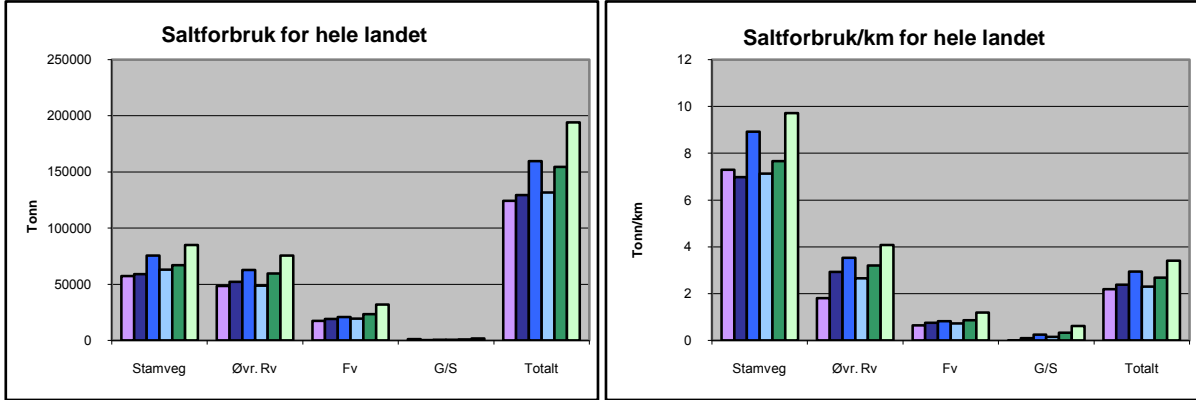


Salt i strøsand

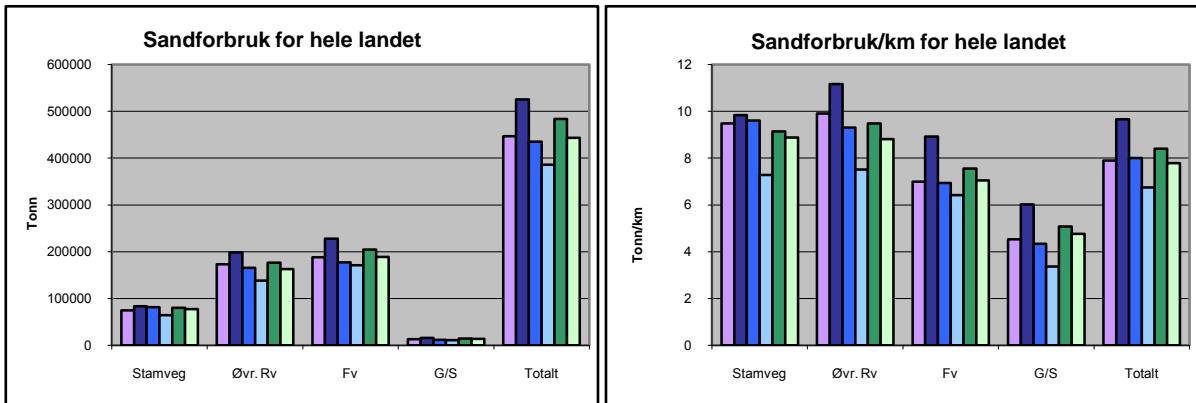


Mengde per vegkatergori for hele landet

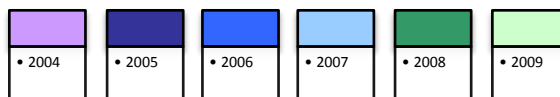
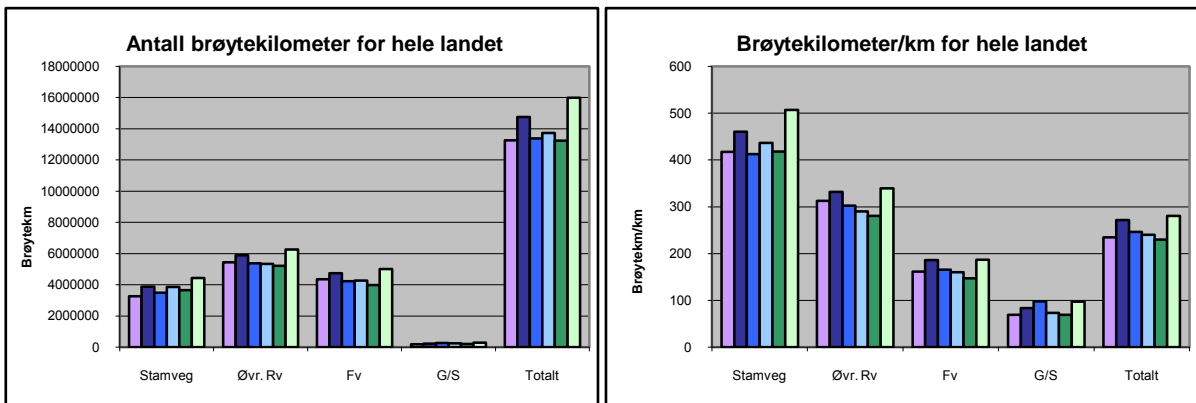
Saltforbruk per vegkatergori for hele landet



Sandforbruk per vegkatergori for hele landet

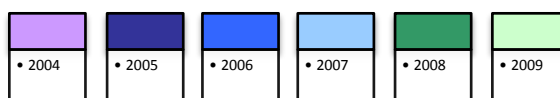
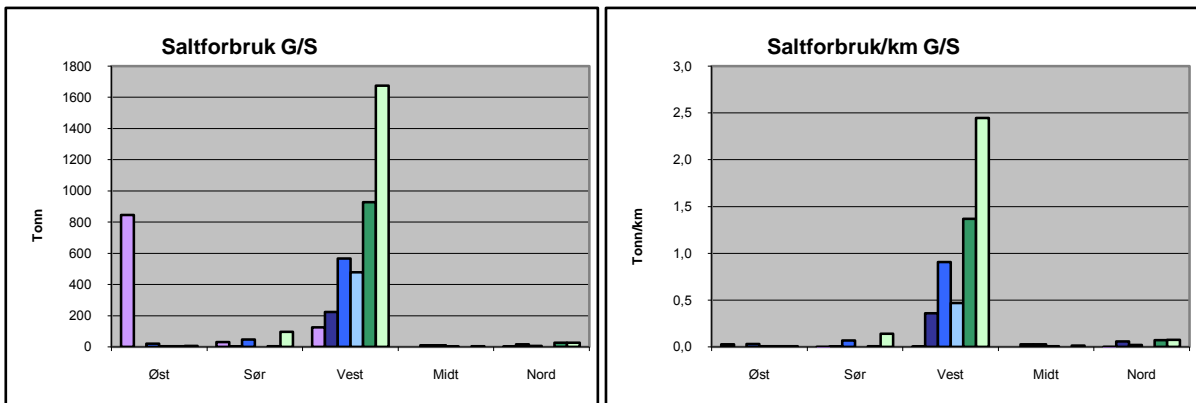
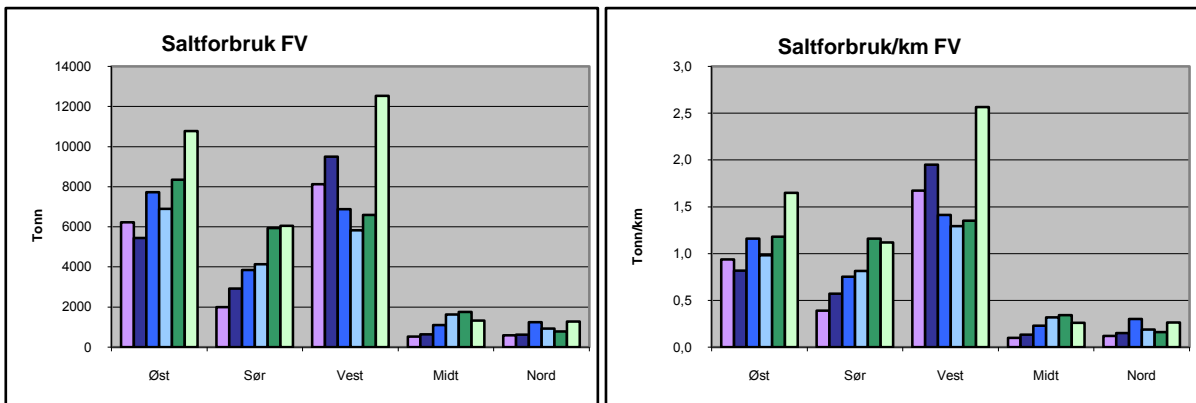
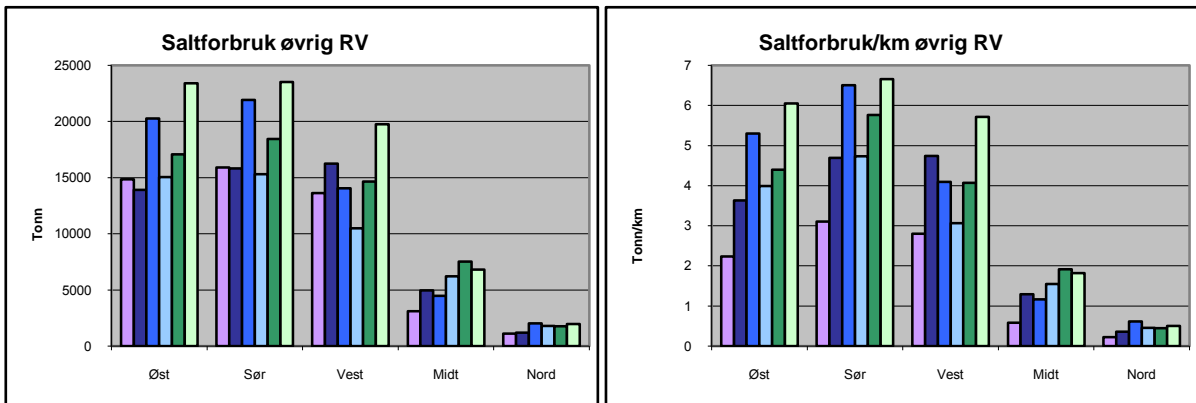
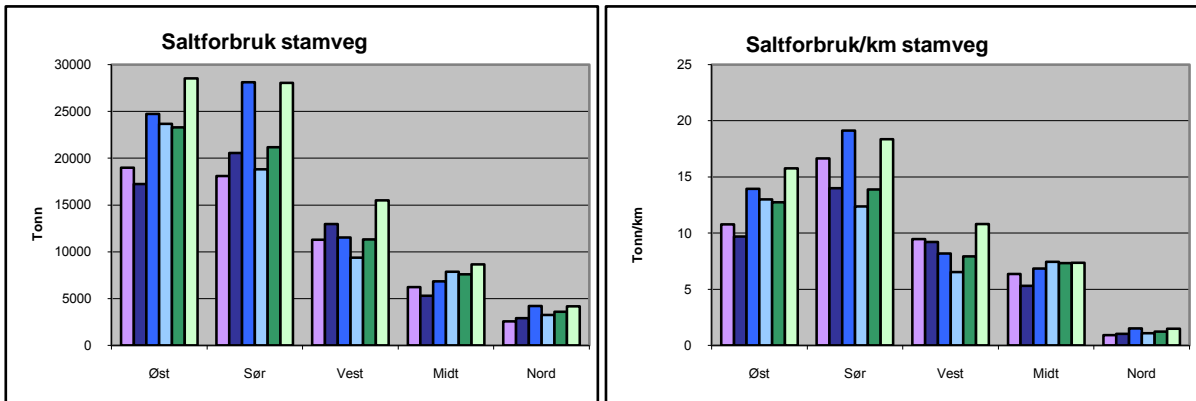


Brøytekilometer per vegkatergori for hele landet

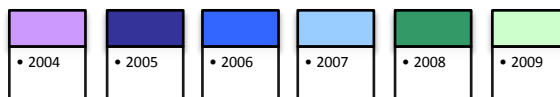
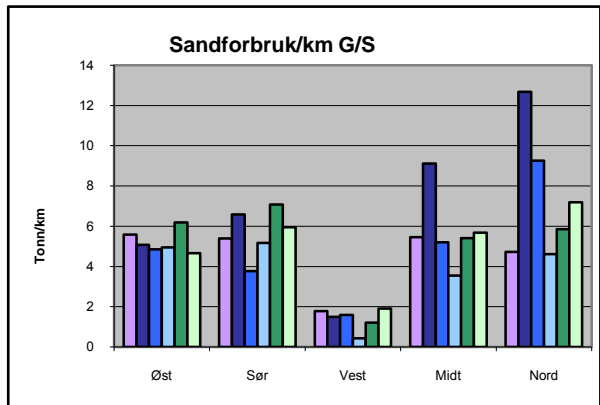
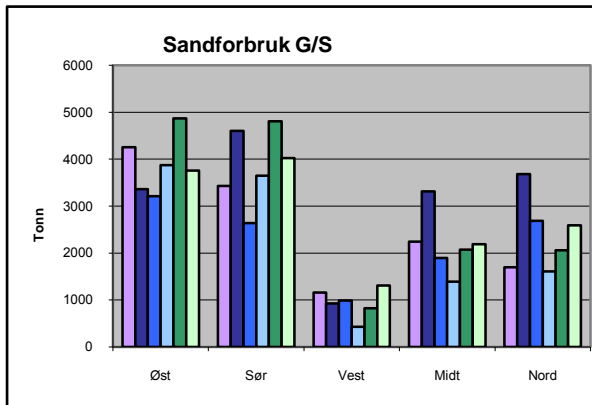
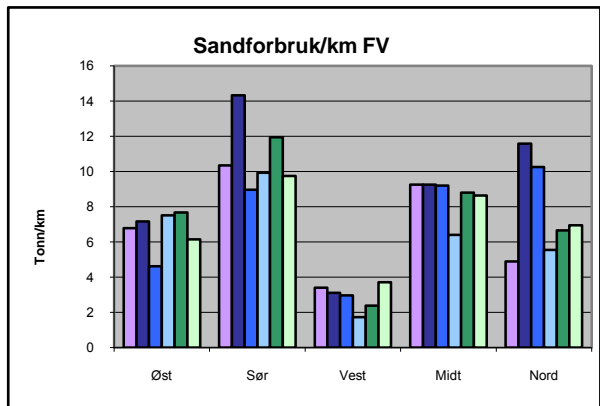
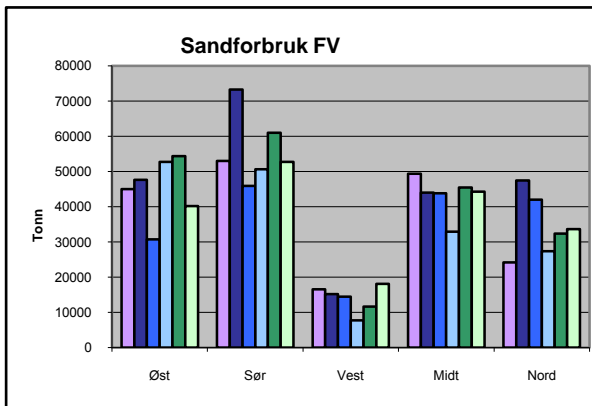
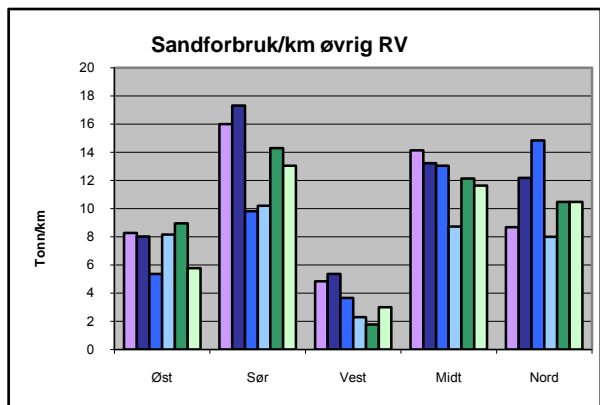
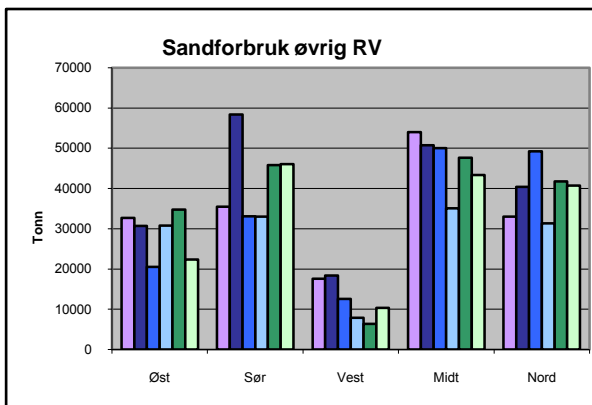
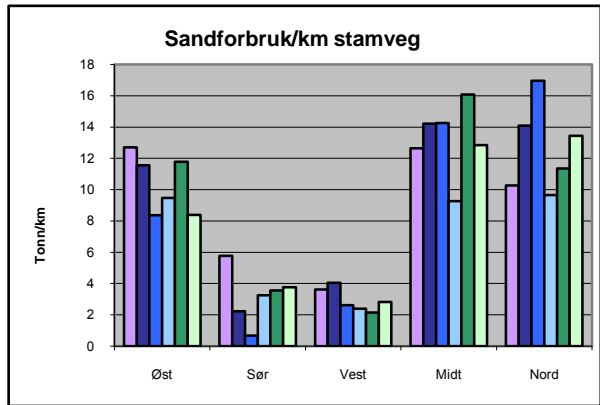
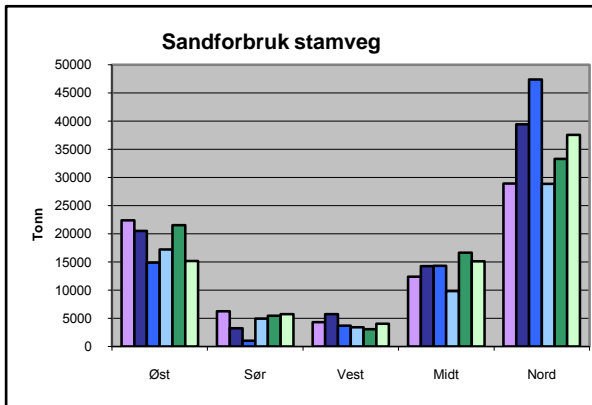


Sammenlikning mellom Regioner

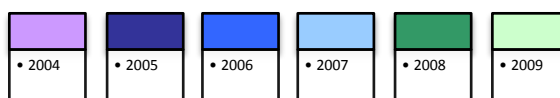
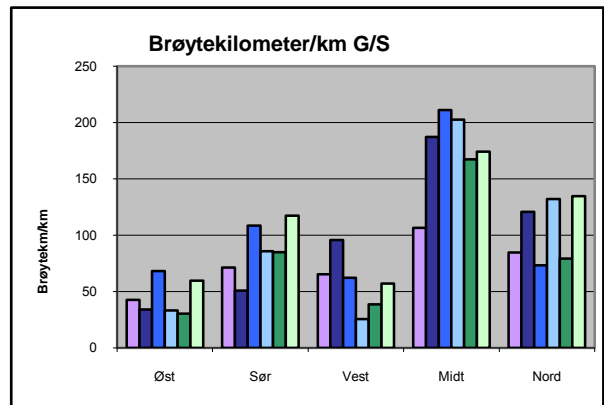
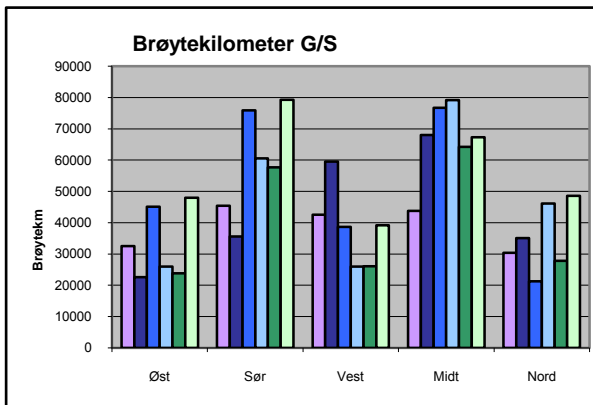
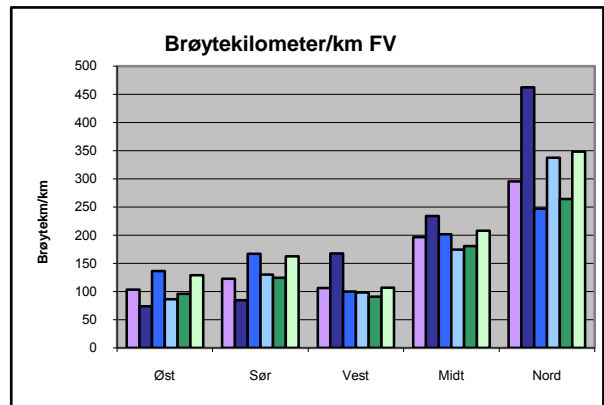
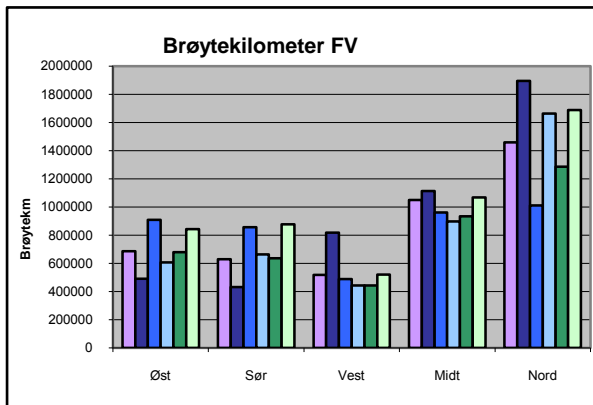
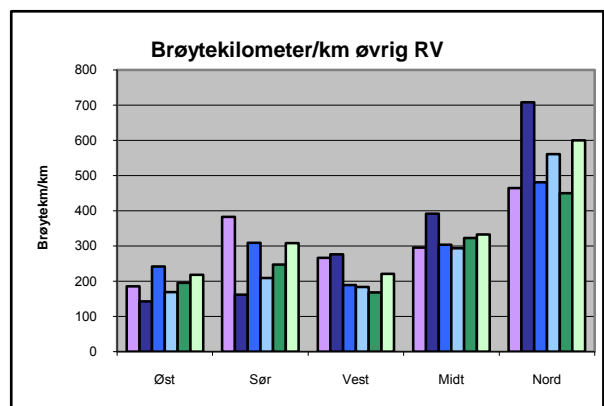
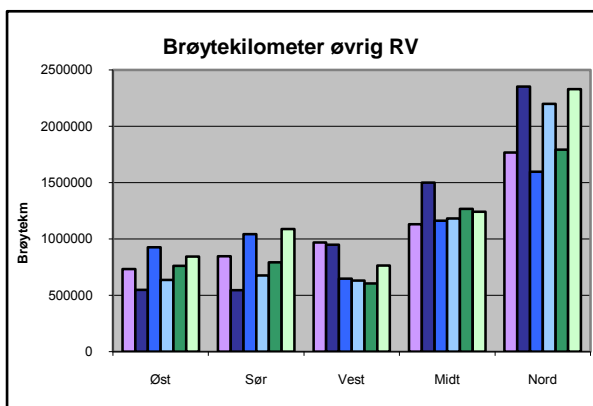
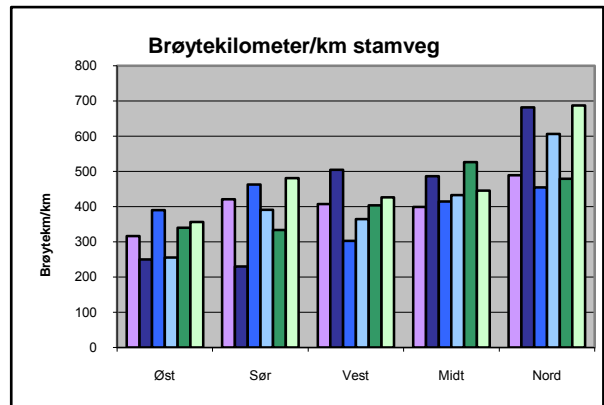
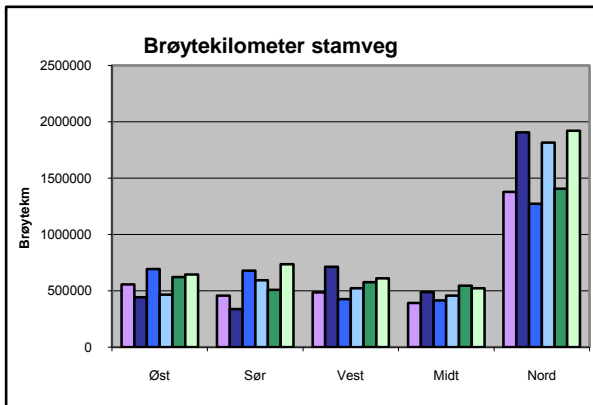
Saltforbruk på ulike vegkategorier per Region



Sandforbruk på ulike vegkategorier per Region

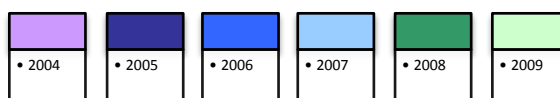
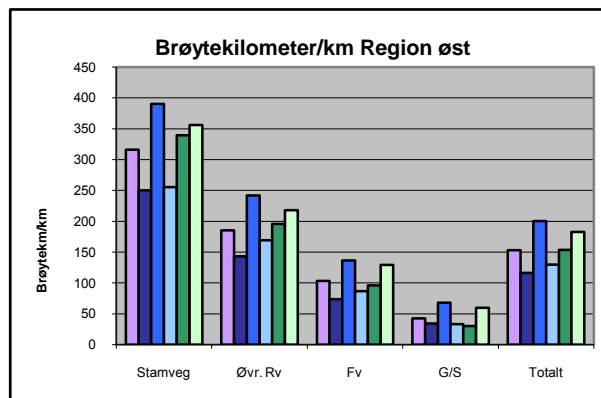
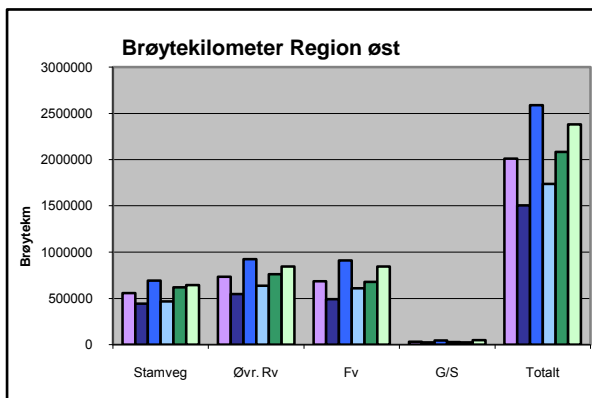
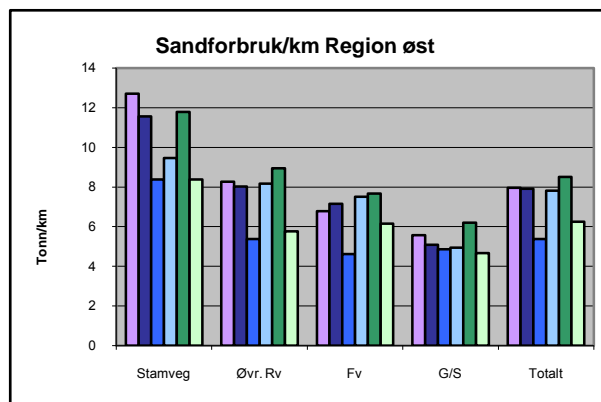
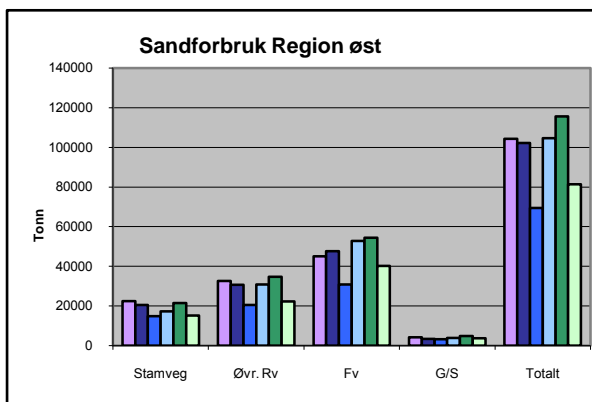
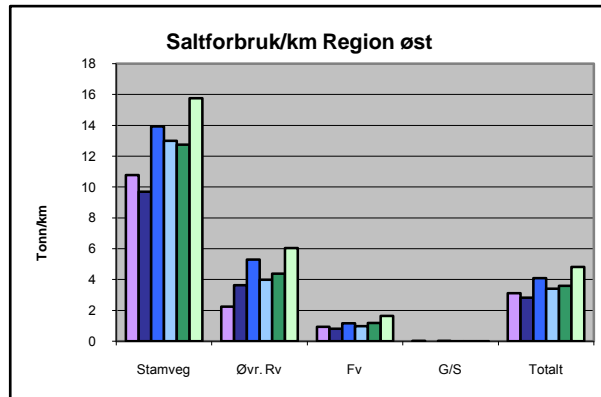
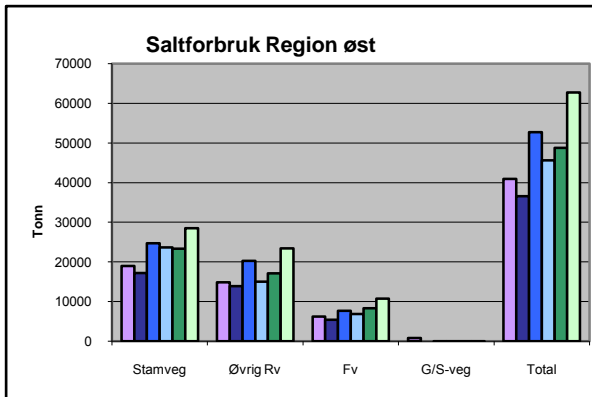


Brøytekilometer på ulike vegkategorier per Region

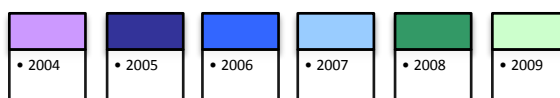
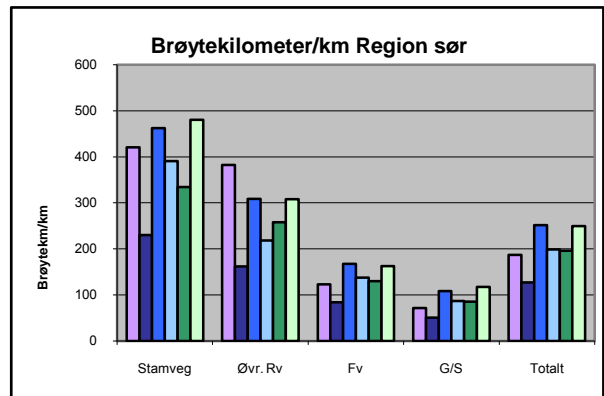
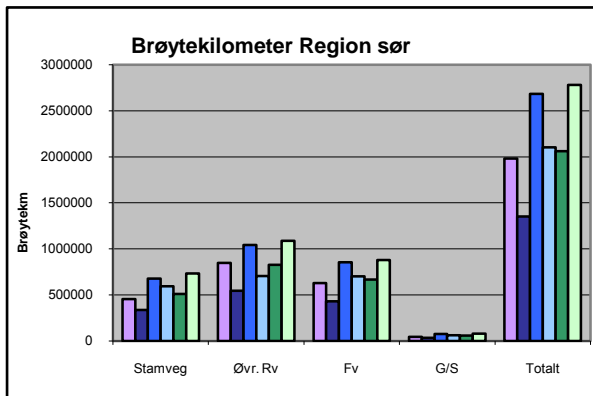
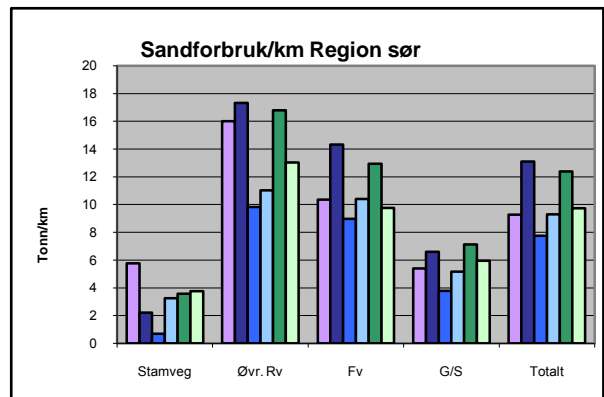
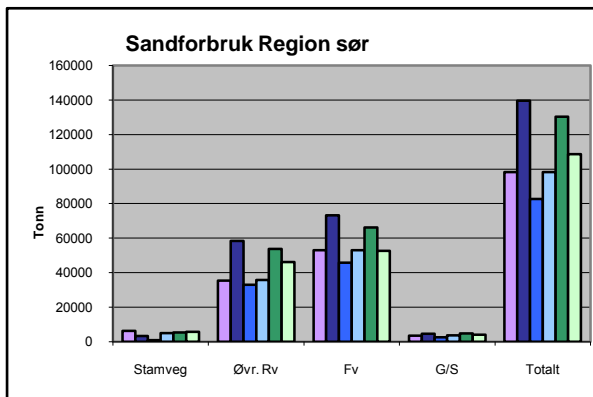
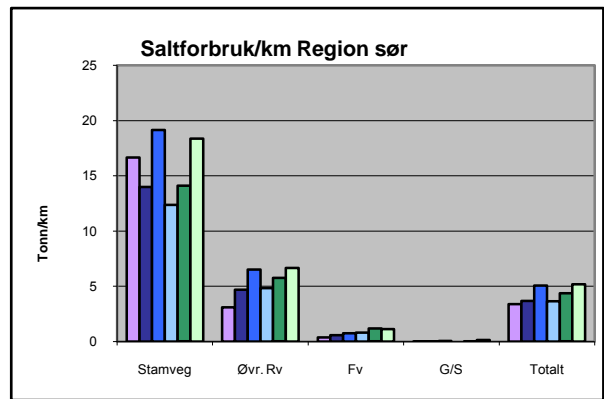
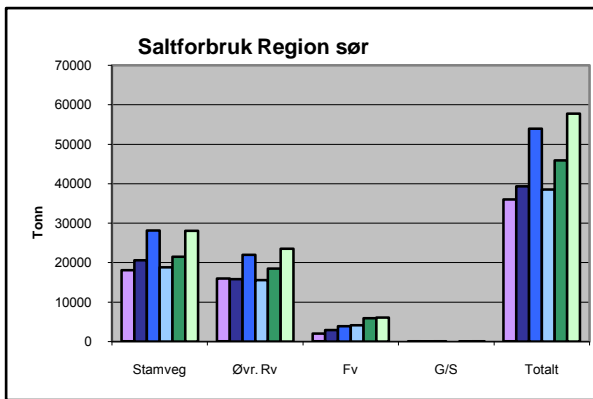


Mengde fordelt på region

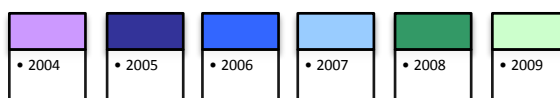
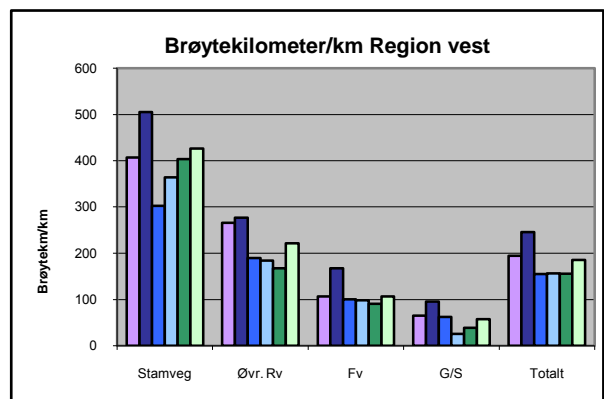
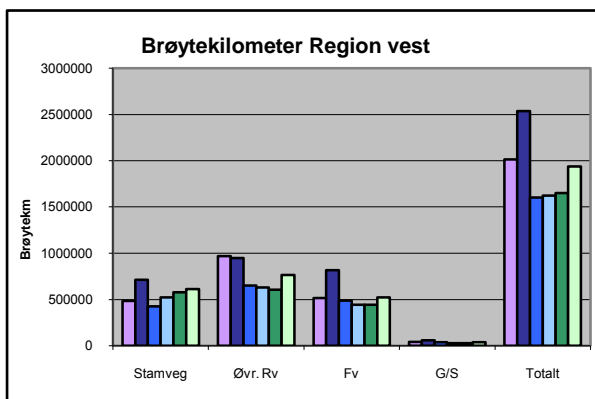
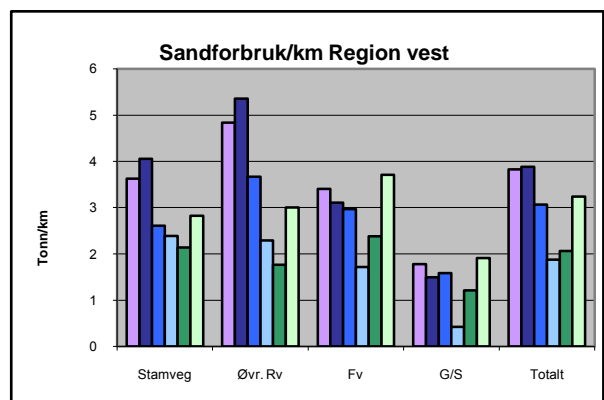
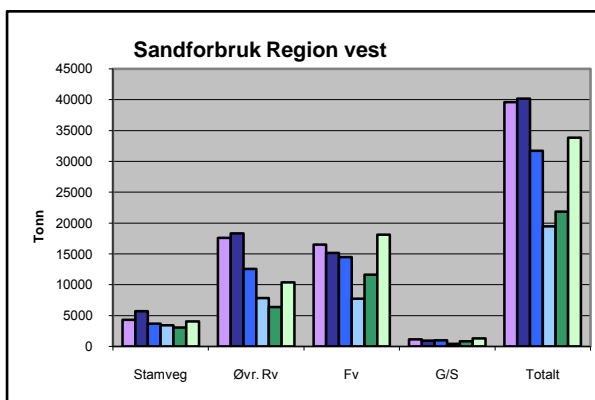
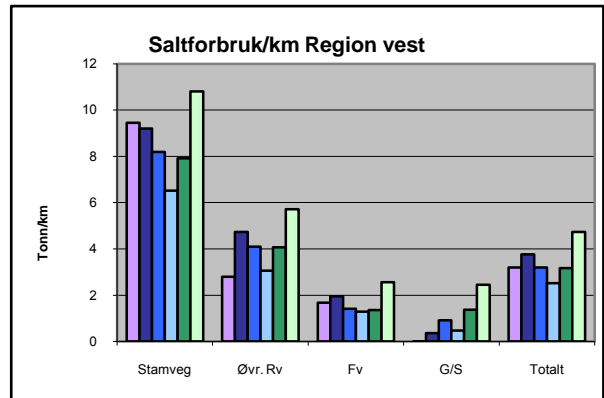
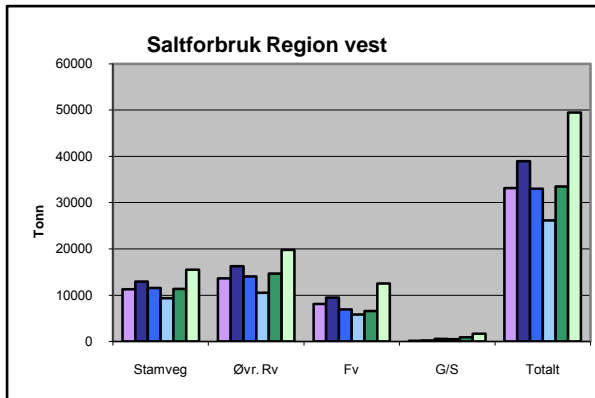
Mengde per vegkategori Region øst



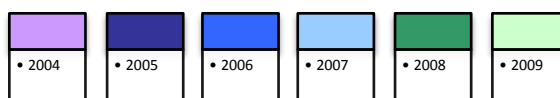
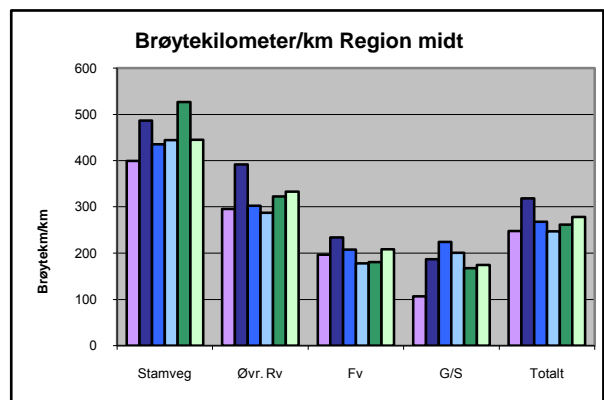
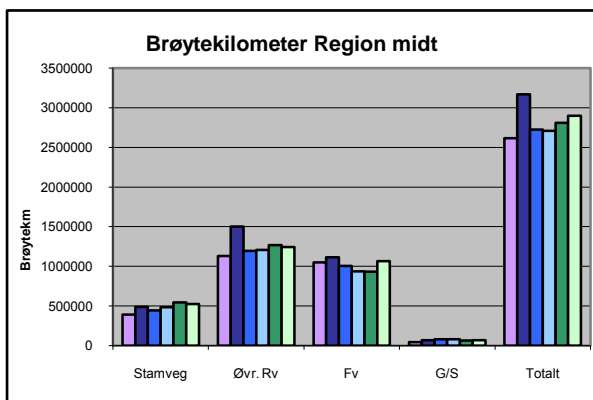
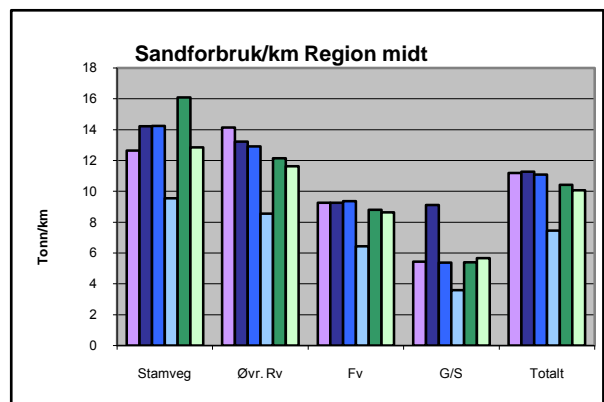
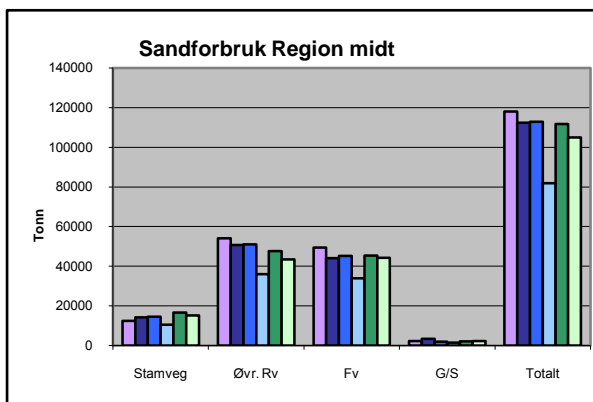
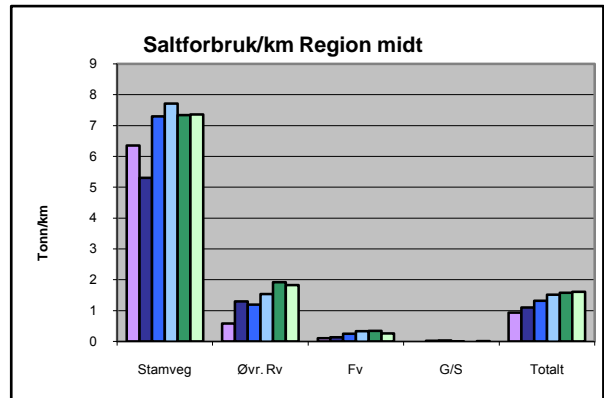
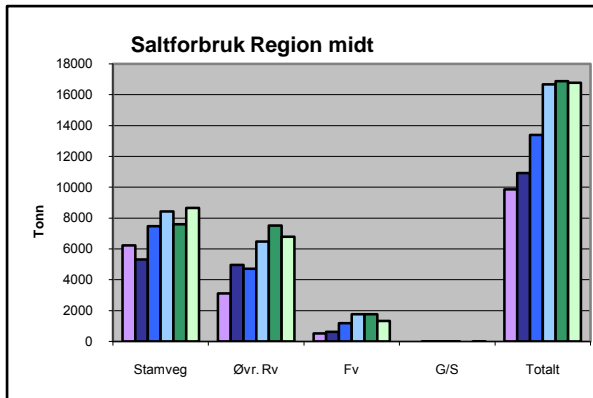
Mengde per vegkategori Region sør



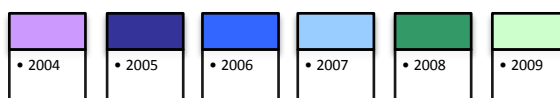
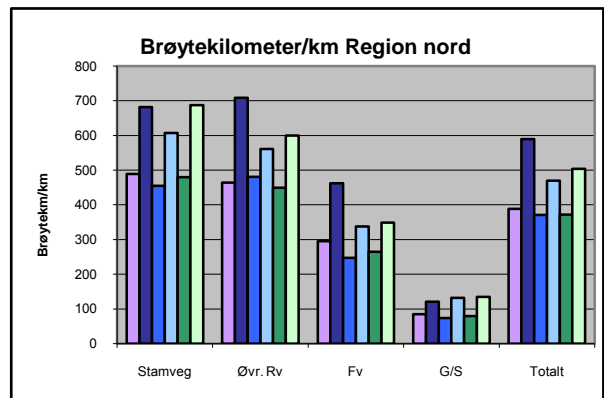
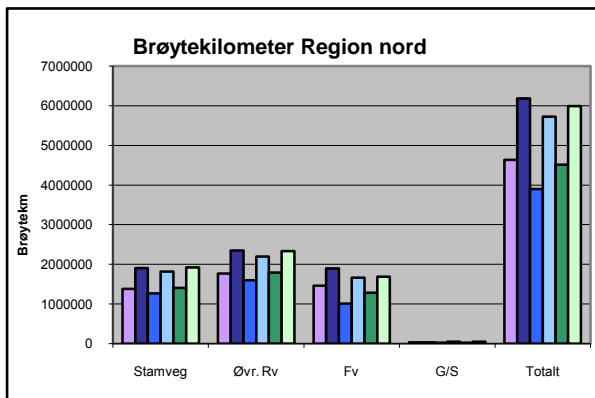
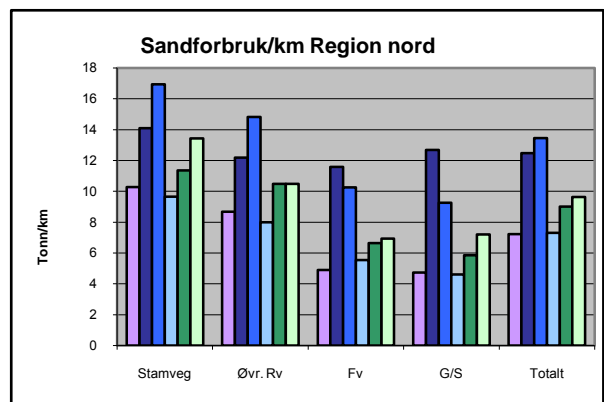
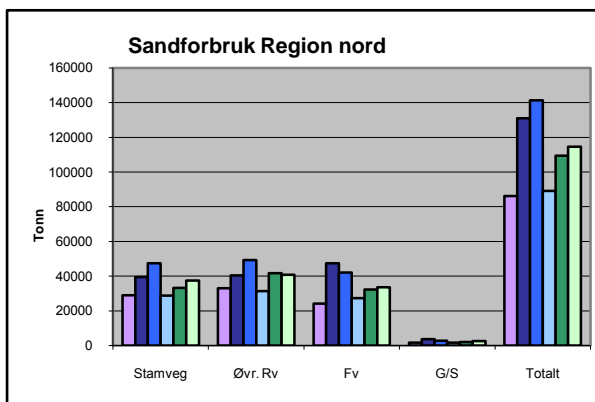
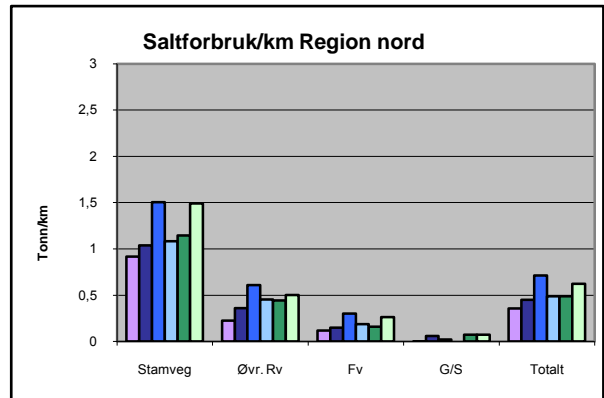
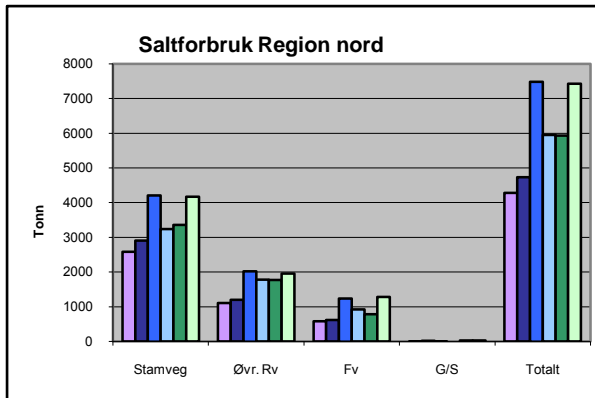
Mengde per vegkategori Region vest



Mengde per vegkategori Region midt



Mengde per vegkategori Region nord



Tabell

Region		Øst	Sør	Vest	Midt	Nord	Total
		Tonn	Tonn	Tonn	Tonn	Tonn	Tonn
Salting. Forbruk av salt på vegger med strategi bar veg	Sum stamveg	26717	26659	11974	6463	800	72613
	Sum øvrig Rv	21406	17327	10809	2201	0	51742
	G/S-veg	1	11	582	0	0	594
	Sum Fv	8179	4065	6379	121	0	18744
	Totalt:	56303	48062	29744	8785	800	143694
Salting. Forbruk av salt på vegger med strategi vinterveg	Sum stamveg	1825	1403	3522	2187	3367	12305
	Sum øvrig Rv	1993	6189	8959	4599	1953	23694
	G/S-veg	4	84	1092	5	27	1212
	Sum Fv	2600	1982	6150	1208	1281	13222
	Totalt:	6423	9657	19724	7999	6629	50432
Salting. Totalt saltforbruk	Sum stamveg	28542	28061	15497	8651	4167	84918
	Sum øvrig Rv	23399	23516	19768	6800	1953	75436
	G/S-veg	5	96	1674	5	27	1807
	Sum Fv	10780	6047	12529	1328	1281	31966
	Totalt	62726	57719	49468	16783	7429	194126
Saltforbruk per km	Barveg	15	15	15	15	2	14
	Vinterveg	0,7	1,2	2,3	0,8	0,6	1,1
Salt, inkludert salt i strøsand	Totalt:	63735	58394	50488	17934	9619	200168
Fordeling på ulike saltingsmetoder	Tørr salt	24461	29120	12666	2848	2051	71146
	Befuktet salt	17100	19822	24976	9023	3178	74099
	Slurry	1129	4180	3803	4161	1228	14500
	Saltløsning	3562	3863	8017	653	974	17069
	Totalt	46252	56985	49462	16684	7431	176814
Bruk av andre typer kjemikalier for å oppnå friksjon eller støvdemping om vinteren	Magnesiumklorid	2007	67	8	132	2	2216
	Annet, beskriv	60	0	0	0	0	60
	Annet, beskriv	0	0	0	0	0	0
	Totalt:	2068	67	8	132	2	2276
Sanding. Forbruk av sand uten saltinnblanding	Sum stamveg	7387	2774	2903	6623	1188	20875
	Sum øvrig Rv	9196	38654	4883	17437	3872	74041
	G/S-veg	2690	3240	741	1072	201	7943
	Sum Fv	19412	40683	6110	17046	4289	87540
	Totalt:	38686	85349	14637	42178	9550	190400
Sanding. Forbruk av saltblandet sand	Sum stamveg	7803	2978	1144	8475	36364	56764
	Sum øvrig Rv	13120	7422	5494	25926	36836	88799
	G/S-veg	1064	781	567	1118	2393	5922
	Sum Fv	20774	12027	11993	27220	29377	101392
	Totalt:	42761	23207	19198	62739	104971	252877
Sanding. Forbruk av salt i strøsand	Totalt:	1009	674	1019	1151	2190	6043
Sanding. Totalt sandforbruk	Sum stamveg	15191	5751	4047	15098	37552	77639
	Sum øvrig Rv	22316	46076	10377	43363	40708	162840
	G/S-veg	3754	4020	1308	2189	2594	13865
	Sum Fv	40186	52709	18104	44267	33666	188932
	Totalt:	81447	108556	33835	104917	114520	443276
Brøytekilometer	Sum stamveg	645247	734811	611076	523176	1919438	4433748
	Sum øvrig Rv	843245	1089364	765445	1241360	2330106	6269519
	G/S-veg	47962	79309	39126	67254	48558	282209
	Sum Fv	842834	877887	520930	1067457	1689242	4998350
	Totalt:	2379288	2781370	1936577	2899247	5987344	15983826
Veglengder	Stamveg total	1812	1529	1434	1175	2794	8744
	Stamveg barveg	1115	1258	699	409	273	3754
	Stamveg vinterveg	697	271	735	766	2521	4989
	Øvrig riksveg total	3868	3535	3458	3729	3883	18473
	Øvrig riksveg bar veg	1747	1397	743	151	101	4139
	Øvrig riksveg vinterveg	1732	2138	2716	3577	3765	13927
	G/S-veg	806	676	685	386	360	2913
	Fylkesveg total	6534	5406	4881	5128	4849	26798
	Fylkesveg barveg	837	544	603	26	11	2021
	Fylkesveg vinterveg	5698	4862	4277	5101	4836	24774
	Total veglengde	13020	11145	10458	10417	11886	56927



Statens vegvesen

Statens vegvesen Vegdirektoratet
Postboks 8142 Dep
N - 0033 Oslo

Tlf. (+47 915) 02030
E-post: publvd@vegvesen.no

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