

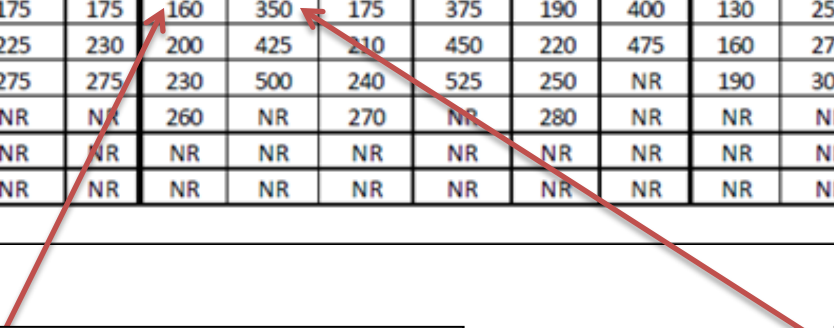
# Clear Roads Application Matrix

## Straight salt with prewet

Table 6

Solid Application Rates for Common Snow and Ice Control Chemicals and Various Winter Weather Events

Pavement temperature, °F, at time of application	Solid NaCl Application Rates - pounds per lane-mile																							
	Pre-Treatment *				Within-Event **																			
	Snow	Frost/Black Ice	Freezing rain	Sleet	Light Snow		Moderate Snow		Heavy Snow		Frost and Black Ice		Light freezing rain		Moderate freezing rain		Heavy freezing rain		Light sleet		Moderate sleet		Heavy sleet	
Anti-icing	Anti-icing	Anti-icing	Anti-icing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	Anti-icing	Deicing	
Over 30	110	100	125	120	110	240	130	265	150	290	100	225	110	240	130	265	150	290	130	265	145	290	165	320
26 to 30	160	130	175	175	160	350	175	375	190	400	130	250	170	350	180	375	190	400	175	385	195	410	210	440
21 to 25	210	160	225	230	200	425	210	450	220	475	160	275	200	425	210	450	220	475	220	465	230	500	240	525
16 to 20	250	190	275	275	230	500	240	525	250	NR	190	300	230	500	240	525	250	NR	250	NR	260	NR	280	NR
11 to 15	NR	NR	NR	NR	260	NR	270	NR	280	NR	NR	NR	260	NR	270	NR	280	NR	285	NR	300	NR	310	NR
6 to 10	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Below 5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR



The 160lbs/lm would be used if crew established a good bond breaker and was able to maintain the health each lap. This would allow minimal chloride usage and provided for maximum mechanical snow removal and best surface conditions possible.

When the bond breaker is lost and snow or ice compacts to the roadway it requires considerable more chloride to chemically remove what we cannot plow off. For the exact same storm event at the same temperature it will require about 220% more chloride to attain the same result. The rate would go from the 160lbs/lm to 350lbs/lm and the risk of dilution increases proportionately. The chance of refreezing increases with the dilution.

ITD created an entire storm curriculum course focusing on bond breaker management along with data driven decision making. This course is unique to Idaho and was implemented last fall.