

CROW WING COUNTY

Snow Event 11-2023-16 March 16-17, 2023



Reported Event Conditions	
Date:	3/16-3/17/2023
Event No:	11-2023-16
Begin Time:	3/16 2 AM
End Time:	3/17 10PM
Weather:	Snow
Precipitation:	3" Snow
Temperature:	35/2
Wind:	15-35 MPH

Event Costs	
Salt	\$58,653
Sand	\$298
Brine	\$2,096
Equipment/Fuel	\$52,613
Personnel Reg.	\$8,758
Personnel OT	\$8,625
Total	\$131,042
Cost Mile	\$234
Season Total:	2.04M

Priority By Route	
Priority 1	
% Target 1A Met:	100%
% Target 1B Met:	100%
Priority 2	
% Target 2A Met:	100%
% Target 2B Met:	100%
Priority 3	
% Target 3A Met:	100%

Legend

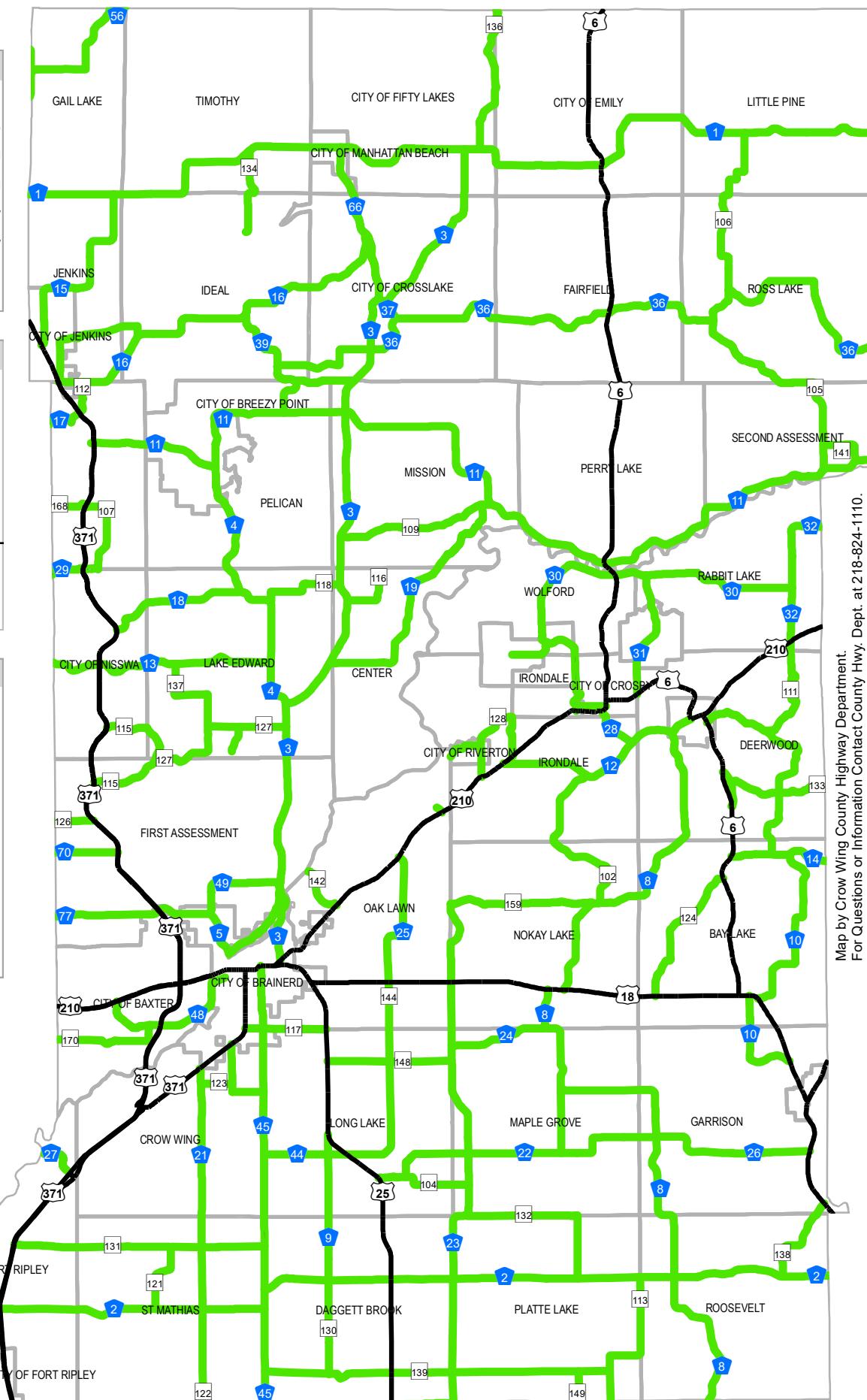
— MnDOT Highway

Route Priority

- 1 (ADT>5000)
- 2 (500>ADT<500)
- 3 (ADT<500)

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved



Map by Crow Wing County Highway Department
For Questions or Information Contact County Hwy Dept at 218-824-1110.
For Information on State Highways Contact MnDOT at 218-828-5700.

2022/2023 Summary For Snow Event 11-2023-16

Date 3/16-3/17/2023

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
404.5	\$58,653	8.75	\$298	3176	\$2,096	\$61,046	\$52,613	\$8,758.00	\$8,625

Total \$131,042

22.4 Plow hrs.

\$5,848 per/hr.

359 Man hrs.

\$234 per/CL/mile

\$4.94 per/household for entire County

Forecast

3" of snow forecasted to begin falling at 7:00 am 3-16-23 and continue until 8:00 pm. Strong winds 15-35 mph. Temps 33-22 degrees. Brief lull then a squall starting at 1:00 pm 3-17 and continuing until 1:00 am 3-18-23, 3/4" forecasted. Strong winds 15-35 mph. Temps 3-14 degrees.

Pre Plan

Snowplows will begin plowing around 9:00 am 3/16 and continue into the evening, placing 200 lbs. salt only where needed because of high winds. The plows will return at 3:00 am 3-17 and apply 300 lbs. salt where needed. Start early 3-18-23 if there is enough snow and most likely push drifts back.

Actual Event

Event start: 3-16-23 2:00AM

Event ended 3-17-23 10PM

Details/Comments

Rain began around 2:00 3-16-23 to the north. Snow started around 9:00 am 3-16-23. Snowplows began patrolling at 11:00 am and plowed until 7:00 pm 3-16. They came back and started plowing at 3:00 am 3/17 to deal with the drifts and the little bit of snow that fell after they plowed on 3-16. Numerous drifts and ice/compaction 3-17. A dusting of snow on 3-17-23 late didn't amount to enough to affect bare wheel paths. Drifting from this snow and previous snow required plowing on 3-18-23.

Conditions

Strong winds 15-35 mph with falling temps. Misty rain began around 2:00 am 3/16/23 to the north. Snow began to fall at 9:00 am 3/16/23. 3/16. 3" of snow fell by 8:00 pm. 3-17-23 snow began to fall at 7:00 pm and continued until 10:00 pm. Strong winds through the evening of 3-18-23.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	31	3\16\23	11:00am	30
Hwy 25	32	3\16\23	11:00am	31
Hwy 6	26	3\16\23	7:00pm	21
Hwy 25	23	3\16\23	7:00pm	22
Hwy 6	10	3\17\23	3:00am	9
Hwy 25	12	3\17\23	3:00am	8
Hwy 6	27	3\17\23	2:00pm	13
Hwy 25	20	3\17\23	2:00pm	17

Date	High	Low
3/15/2023	30	-5
3/16/2023	35	2
3/17/2023	14	2
3/18/2023	25	3

Source: weather.com. Monthly Weather. 56401

Summary

Continually falling snow on 3-16 and warmer pavement temps had the snow sticking to the roads. Salt was applied to break the bond but the strong winds caused drifting and compaction issues overnight. Roads cleaned up marginally on 3-17 but the wind and colder pavement temps did not allow the salt to work as effectively. Drifting burned off on their own later 3-18-23 after initial push back.

Decisions Made

Plow, apply salt and continue to push back drifts.

Lessons Learned

Strong winds and warmer pavement temps caused snow to stick to roadways.

Goals Met/Not Met

	Plowing	Goals
Priority 1	Met	6 hr.
Priority 2	Met	8 hr.
Priority 3	Met	10 hr.

	Bare wheel paths	Goals
Priority 1	Met	18 Hr.
Priority 2	Met	48 hr.