

CROW WING COUNTY

Snow Event 16-2022-5 December 22, 2022

Reported Event Conditions

Date:	12/20/2022
Event No:	15-2022-4
Begin Time:	12/19 2PM
End Time:	12/20 2AM
Weather:	Snow
Precipitation:	2" Snow
Temperature:	9/-18
Wind:	0-5 MPH

Event Costs

Salt	\$0
Sand	\$1,207
Brine	\$296
Equipment/Fuel	\$16,418
Personnel Reg.	\$3,162
Personnel OT	\$2,460
Total	\$23,543
Cost Mile	\$42
Season Total:	\$491,945

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%
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— MnDOT Highway

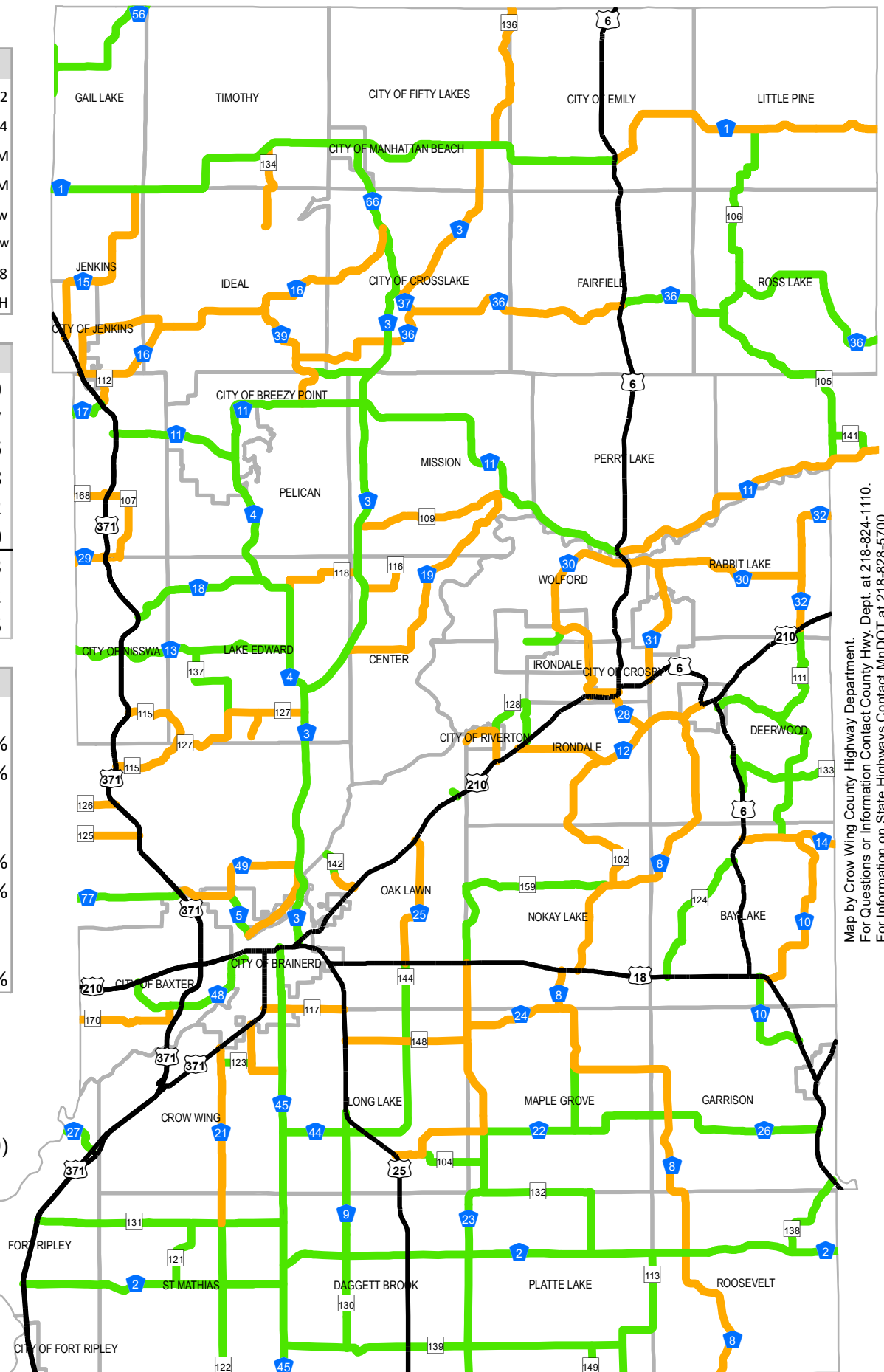
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 12/27/2022



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.

Date 12-22-22

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
20	\$1,820	115	\$3,910	730.25	\$482	\$6,212	\$55,825	\$12,460.00	\$8,292

Total	\$82,789	33.6 Plow hrs.	\$2,464 per/hr.
		537.50 Man hrs.	\$148 per/CL/mile
			\$3.12 per/household for entire County

Forecast

4" of snow forecasted to begin falling at 8:00 a.m. on 12/21 and continue until 3:00 a.m. 12/22. Winds increasing from 0 mph on 12/21 to 45 mph 12/24.

Pre Plan

Start plowing mid-morning on 12-21 as snow accumulates enough to plow. Continue plowing until 7:00 p.m. 12/21 to get traffic home. Resume plowing at 2:00 a.m. 12-22 and apply 450 lbs. of sand to intersections if needed. Start at 7:00 am 12/23 to check roads for drifting.

Actual Event

Event start: 12-21-22 7:00 a.m.

Event ended 12-22-22 3:00 a.m.

Details/Comments

Snowplows began plowing around 10:00 a.m. 12/21 and continued until 7:00 p.m. Plows resumed plowing at 2:00 a.m. 12/22 and applied 450 lbs. of sand to intersections where needed. Plows began checking roads at 7:00 am 12/23 to push back drifts and apply sand to icy intersections. Slow moving traffic areas and intersections continued to pack down with the blowing snow and car exhaust added to the ice issues at intersections.

Conditions

Extremely cold -25 wind chill with light fluffy snow. Strong winds 15-40 mph 12/23-12/25.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	-4	12/21/22	10:00am	-12
Hwy 25	-4	12/21/22	10:00am	-11
Hwy 6	-5	12/22/22	3:00am	-9
Hwy 25	6	12/22/22	3:00am	-9
Hwy 6	-9	12/23/22	7:00am	-11
Hwy 25	-10	12/23/22	7:00am	-12

Date	High	Low
12/20/2022	-2	-18
12/21/2022	-6	-12
12/22/2022	-6	-14
12/23/2022	0	-10
12/24/2022	5	-9
12/25/2022	7	-5

Source: weather.com. Monthly Weather. 56401

Summary

Fluffy snow cleaned up well. There was not a lot of traffic the morning of 12/22, which didn't help blow the snow off the roads. Roads cleaned up well but could have benefited from traffic blowing residual snow off of the roads. Winds increased to 30 mph at 9:00 am 12/23, contributing to continued drifting and pack at intersections. The blowing snow and bitterly cold temps did not allow us to reach our goals for bare wheel paths on some priority 1 intersections and on all priority 2 roads. A majority of priority 2 roads had continuous wheel paths but slow moving areas and intersections prevented those roads from achieving the goal of a continuous wheel path in both directions. Plows were out 12/23, 12/24 & 12/26 dealing with drifting and treating slippery intersections with sand. On 12/26 we applied a 50/50 mix of salt and sand for traction and melting since the wind died down and temps were above zero. Roads were in much better condition after scraping and application on 12/26.

Decisions Made

Continue plowing late 12/21 and resume 12/22 at 2:00 am, while applying 450 lbs. of sand to intersections where it is needed. Plows return on 12/23, 12/24 & 12/26 to deal with drifts and slippery intersections.

Lessons Learned

Cold temps and dry snow helped the roads clean up well. Blowing snow and exhaust caused intersections to continue to build up and freeze. Sand worked well for traction at intersections but did not provide benefit to melt or limit continued compaction.

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	Not Met	18 Hr.
Priority 2	Not Met	48 hr.